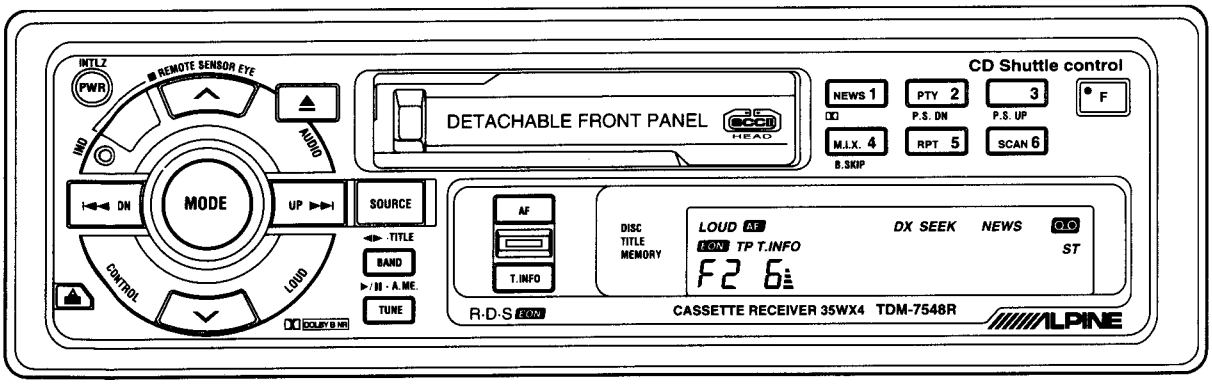
ALPINE®

SERVICE MANUAL

FM/MW/LW/RDS Cassette Receiver

CD Shuttle Controller

● For the cassette deck mechanism parts (GR75S310) of this model, refer to the Service Manual • GR-S Series (Part No. 68E24873S01).



TDM-7548R/ TDM-7547R

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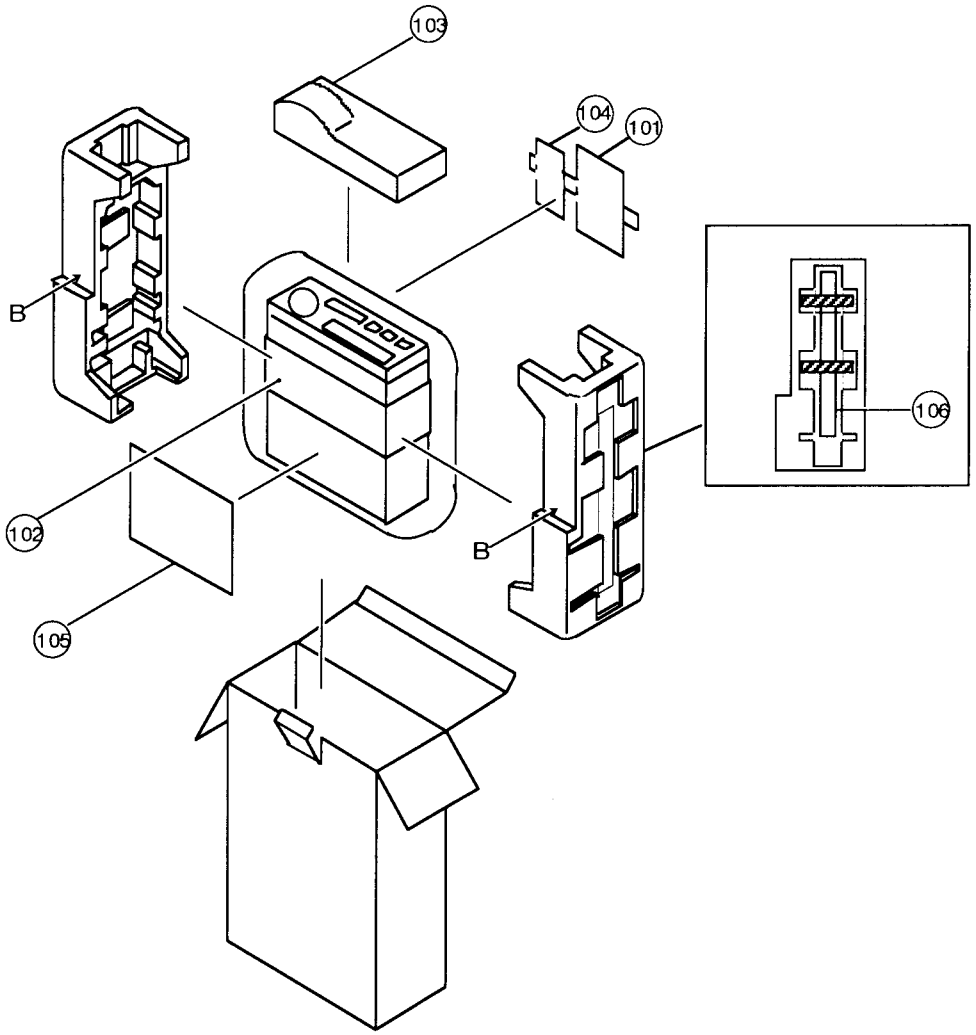
Packing Assembly Parts List

Symbol No.	Part No.	Description
101	01V71700W71	Assy., Kit (ISO)
102	15D50406W01	Case, Inner
103	15D71506W01	Carrying, Case
104	01T85297W01	Assy., ISO Wire
105-1	68P90579W51	Owner's Manual (English/Francais/Espanol)
105-2	68P90579W52	Owner's Manual (Deutsch/Italiano/Svenska)
106	07B64552F01	Bracket, Strap Receiver

Symbol No.	Part No.	Description

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

Packing Method View



Specifications

FM RADIO

Intermediate Frequency	10.7±0.1MHz
Frequency Range	87.5~108MHz
Usable Sensitivity (Mono, 30dB S/N, at 98.1MHz)	17.2dBf
-3dB Limiting Sensitivity (at 98.1MHz)	19.2dBf
Residual Noise (Ref. 400Hz, at 98.1MHz)	25±5dB
S/N Ratio (Stereo, at 98.1MHz)	56dB
Image Rejection (at 106.1MHz)	40dB
IF Rejection (at 90.1MHz)	60dB
Distortion (Input 60dB μ, at 98.1MHz)	1%
Frequency Response (Ref. 400Hz, at 98.1MHz)	100Hz : 0±3dB
	10kHz : -12±3dB
Stereo Separation (1kHz, at 98.1MHz)	20dB
PS Sensitivity (at 98.1MHz)	36.2dBf
TP Sensitivity (at 98.1MHz)	36.2dBf

MW RADIO

Intermediate Frequency	450kHz
Frequency Range	531~1,602kHz
Usable Sensitivity (20dB S/N, at 999kHz)	35dB
S/N Ratio (at 999kHz)	44dB
Image Rejection (at 1,404kHz)	50dB
IF Rejection (at 603kHz)	60dB
Distortion (at 999kHz)	1.5%
Frequency Response (Ref. 400Hz, at 999kHz)	100Hz : -3±4dB
	4kHz : -12+6, -12dB

LW RADIO

Intermediate Frequency	450kHz
Frequency Range	153~281kHz
Usable Sensitivity (20dB S/N, at 216kHz)	41dB
S/N Ratio (at 216kHz)	42dB
Image Rejection (at 270kHz)	40dB
IF Rejection (at 162kHz)	50dB
Distortion (at 216kHz)	1.5%
Frequency Response (Ref. 400Hz, at 216kHz)	100Hz : -3±4dB
	4kHz : -12+6, -12dB

TAPE PLAYER

Wow & Flutter (JIS, WRMS/MTT-111N)	0.2%
Tape Speed (MTT-111N)	4.76cm/sec.+3 to -1%
S/N Ratio (MTT-212N)	Dolby OFF : 52dB
Distortion (MTT-118N)	2%
Frequency Response (Ref. 1kHz, -3dB, MTT-256)	250Hz~10kHz
Separation (MTT-141N)	35dB
Crosstalk (MTT-121N)	45dB

GENERAL

Power Supply	DC14.4V
Power Output/Impedance	16W/ch/4ohm
Semiconductors	21IC's, 43Transistors, 20Diodes, 6Zener Diodes (○)
	16IC's, 37Transistors, 19Diodes, 6Zener Diodes (●)
Dimensions (W×H×D)	Chassis : 178×50×152mm
	Nose : 170×46×18mm
Weight	1.4kg

Note : Due to Continuing product improvement, specifications and designs are subject to change without notice.
○ : For TDM-7548R Model Only, ● : For TDM-7547R Model Only, Others :Common.

Adjustment Procedures

1. TAPE PLAYER SECTION

(1) Connection

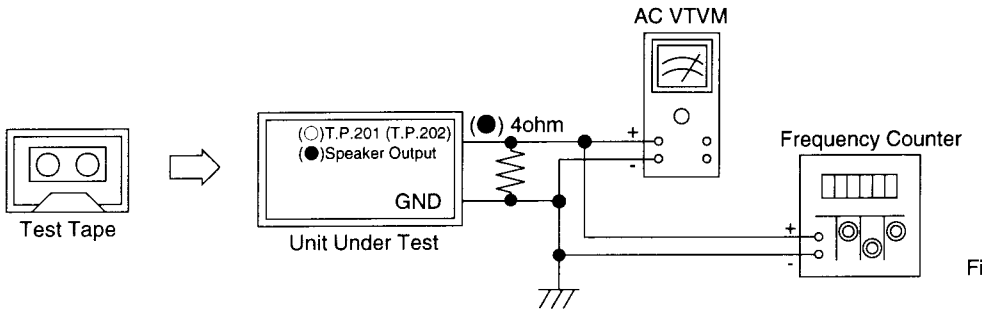


Figure 1

(2) Control Settings

Power Switch	ON
Fader Control	Center Position
Balance Control	Center Position
Treble/Bass Control	Center Position
Others	OFF

(3) The necessaries for adjustment
GR-S Extension Cord
Assy., EX Cord Kit for GR-S Mechanism
Part No. 01E23255S01
See Adjustment Locations (Figure 4).

(4) Adjustment Procedures

Step	Description	Test Tape	Connection	Test Point		Adjustment Point	Adjustment
1	Head Azimuth Adjustment	MTT-114NB (14kHz)	Figure 1	○	T.P.201 (Lch) T.P.202 (Rch)	Head Azimuth Adjustment Screws (Figure 2)	Adjust for Max. and same level output at Forward and Reverse positions.
				●	Speaker Output		
2 (○)	Dolby Level Adjustment	MTT-150 (400Hz)	Figure 1	T.P.201 (Lch) T.P.202 (Rch)		VR201 (Lch) VR202 (Rch)	Adjust for 388mV ±0.5dB at T.P.201 (Lch) and T.P.202 (Rch).
3	Tape Speed Adjustment	MTT-111N (3kHz)	Figure 1	○	T.P.201 (Lch) or T.P.202 (Rch)	Tape Speed Adjustment (Figure 3)	Adjust for 2,970 to 3,090Hz.
				●	Speaker Output		

NOTE: ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common

Description of IC Terminal

75099W56 : IC502

No.	Symbol	I/O	Terminal Description
1	KEY A/D 3	I	Key Data input terminal.
2	KEY A/D 2		
3	KEY A/D 1		
4	GND	—	GND connect terminal.
5	NC	—	No connect terminal.
6			
7	V_{DD}	—	V_{DD} connect terminal.
8	MONI RXD	I	RDS Monitor input terminal (No connect terminal) .
9	MONI TXD	O	RDS Monitor output terminal (No connect terminal) .
10	RDS SYNC	O	RDS SYNC signal output terminal (No connect terminal) .
11	$\overline{\text{LCD INH}}$	O	INH signal output terminal to LCD Driver (IC401).
12	LCD DATA	O	Serial Data output terminal to LCD Driver (IC401).
13	LCD CLK	O	Serial Clock output terminal to LCD Driver (IC401).
14	LCD CE	O	CE signal output terminal to LCD Driver (IC401).
15	LED IND	O	Function Indicator control signal output terminal. Hi : Lighting Lo : Turn out the lights.
16	NC	—	No connect terminal.
∫			
18			
19	○ NOSE POWER	O	Nose Power control signal output terminal.
	● NC	—	No connect terminal.
20	NC	—	No connect terminal.
21	POWER CONT	O	Power control signal output terminal for Audio/Light/Tuner, etc.
22	A-MUTE	O	Audio Mute signal output terminal.
23	IF MUTE	O	IF Mute output terminal.
24	NFP 1	O	NFP control signal output terminal.
25	NFP 2		
26	$\overline{\text{DOLBY B}}$	O	Dolby B • NR ON/OFF signal output terminal. Hi : OFF LO : ON
27	PAUSE SW	I	Pause Mode detection input terminal.
28	FOR RUN DET	I	FOR REEL rotation detection input terminal.
29	MODE SW	I	Mode detection input terminal.
30	REV RUN DET	I	REV REEL rotation detection input terminal.
31	NC	—	No connect terminal.
32	F-IN	O	Sub Motor rotation control output terminal. CCW CW BRAKE OFF R-IN Hi Lo Hi Lo
33	GND	—	GND connect terminal.

Adjustment Locations

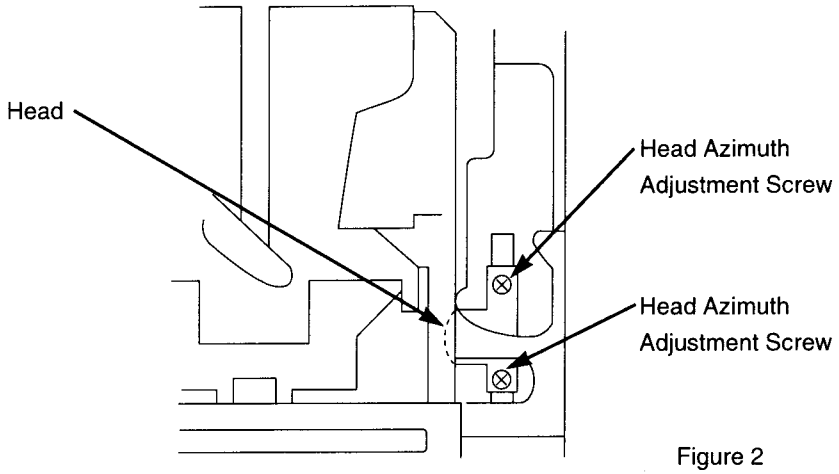


Figure 2

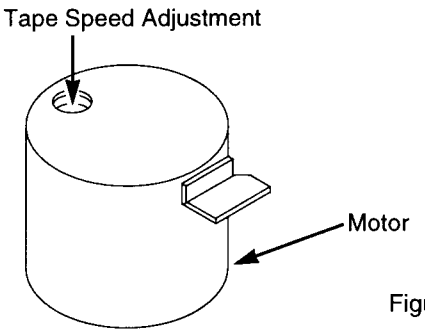


Figure 3

Cassette Deck Mechanism

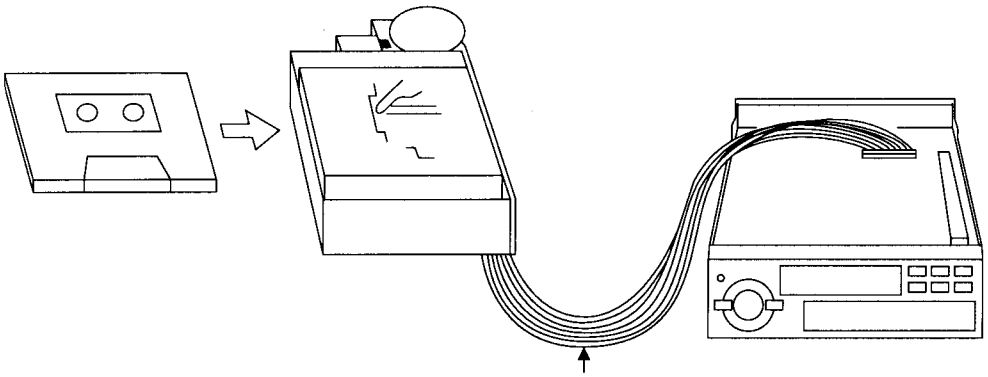


Figure 4

Extension Cord (Part No. 01E23255S01)

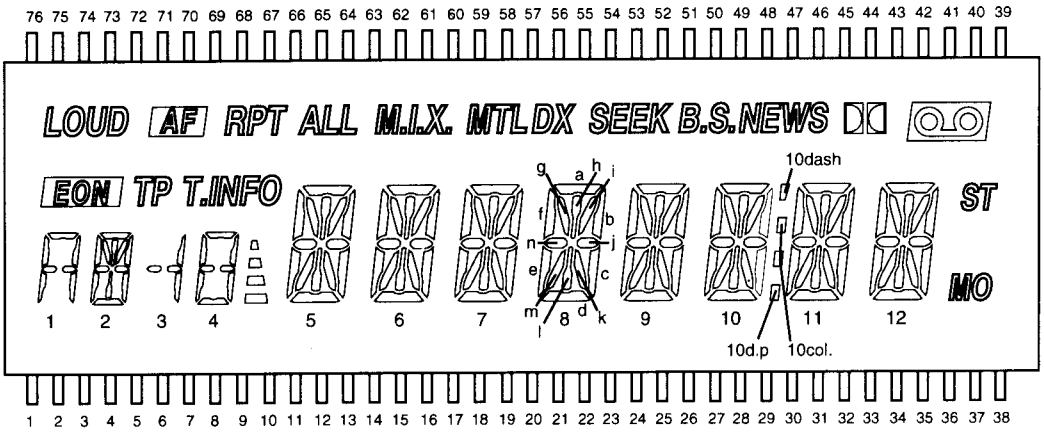
NOTE: For the Adjustment parts (VR201, VR202) and Test Points (T.P.201, 202), refer to the Parts Layout on P.C. Boards and Wiring Diagram.

No.	Symbol	I/O	Terminal Description
34	R-IN	O	Sub Motor rotation control output terminal. F-IN: CCW Lo, CW Hi, BRAKE Hi, OFF Lo
35	O-MOTOR	O	Motor rotation control output terminal. Hi : Rotate Lo : STOP
36	○ SCL	O	Clock output terminal for E²P-ROM.
	● NC	—	No connect terminal.
37	○ SDA	I/O	E²P-ROM Data terminal.
	● NC	—	No connect terminal.
38	EV-CLK	O	Serial Clock output terminal to Electrical Volume (IC221).
39	EV-DATA	O	Serial Data output terminal to Electrical Volume (IC221).
40	PACK IN SW	I	Pack In detection input terminal. Hi : Pack In Lo : Pack Out
41	FOR/$\overline{\text{REV}}$	O	Tape Direction indicator output terminal. Hi : FOR Lo : REV
42	METAL	I	Metal Tape detection terminal. Hi : METAL Lo : NORMAL
43	L. O. FAST	O	Gain control signal output terminal for M. S. IC at CUE/REV. Hi : CUE/REV Lo : PLAY
44	M. S. DET	I	Music Sensor detection sigal input terminal.
45	LOC/$\overline{\text{DX}}$	O	LOCAL/DX signal output terminal. Hi : During SEEK LOCAL
46	LW	O	LW band selection signal output terminal.
47	50K REF	O	L. P. F. Switching output terminal at RDS mode.
48	NC	—	No connect terminal.
49	SD	I	SD signal input terminal.
50	ALARM	O	ALARM signal output terminal. (2.4KHz)
51	$\overline{\text{IF REQ}}$	O	Tuner REQ signal output terminal. Hi : During SEEK
52	$\overline{\text{ST IND}}$	I	ST signal input terminal.
53	NC	—	No connect terminal.
54	FM/$\overline{\text{AM}}$	O	FM/AM switching signal output terminal. Hi : FM
55	PLL D0	I	Data input terminal from PLL (IC401).
56	PLL CLK	O	Sync. Signal output terminal to PLL.
57	PLL DI	O	Data output terminal to PLL (IC401).
58	PLL CE	O	Data communication control signal output terminal to PLL.
59	RDS DATA	I	RDS Data input terminal from RDS Decoder (IC061).
60	$\overline{\text{RESET}}$	I	System Reset signal input terminal.
61	REMOCON	I	Remocon Data input terminal.
62	ACC DET	I	ACC detection signal input terminal.
63	BAT DET	I	BATT detection signal input terminal.
64	RDS CLOCK	I	RDS Clock input terminal from RDS Decoder.
65	CHG BUS IN	I	Data signal input terminal from Changer BUS I/F.
66	CHG BUS OUT	O	Data signal output terminal to Changer BUS I/F.
67	PLL DOWN	—	Pull down terminal.
68	V_{DD}	—	V_{DD} connect terminal.

No.	Symbol	I/O	Terminal Description
69	X2	O	System Clock OSC connection terminal. (4.9152MHz)
70	X1	I	
71	GND	—	GND connect terminal.
72	NC	—	No connect terminal.
73	GND	—	GND connect terminal.
74	AV_{DD}	—	Analog Power Supply terminal for A/D converter.
75	AV_{REF}	—	Reference Voltage terminal for A/D converter.
76	S-METER	I	Signal Meter input terminal.
77	MULTI PATH	I	Port detects multi path interference of station.
78	SELECT	I	Model set up terminal.
79	GND	—	GND connect terminal.
80	NOSE ON	I	Front Panel detection signal input terminal.

NOTE: ○ : For TDM-7548R Model Only, ● : For TDM-7547R Model Only, Others : Common

LCD Display



Pin No.	1	2	3	4	5	6	7	8	9	10
COM.1	1b, c		2e	2d		4d	4c			
COM.2	EON	2a	2f, g		2i	4f	4a			
COM.3	1a, e, f, j, n	2h	2n	2l	2j	4n, j	4b			

11	12	13	14	15	16	17	18	19	20
5m	5d	5k	5c	6m	6k	7m	7d	7k	8m
5n	5h, l	5j	6e	6n	6j	7n	7h, l	7j	8n
5g	5i	5b	6f	6g	6i	7g	7a	7i	8g

21	22	23	24	25	26	27	28	29	30
8d	8k	8c	9m	9d	9k	10m	10d	10k	10d, p
8h, l	8j	9e	9n	9h, l	9j	10n	10h, l	10j	10col
8i	8b	9f	9g	9a	9i	10g	10a	10i	10dash

31	32	33	34	35	36	37	38	39	40
11m	11k	12e	12m	12d	12k	12c	MO	COM.1	
11n	11j	11c	12n	12h, l	12j	12b	ST		COM.2
11g	11i	11b	12f	12g	12i	12a			

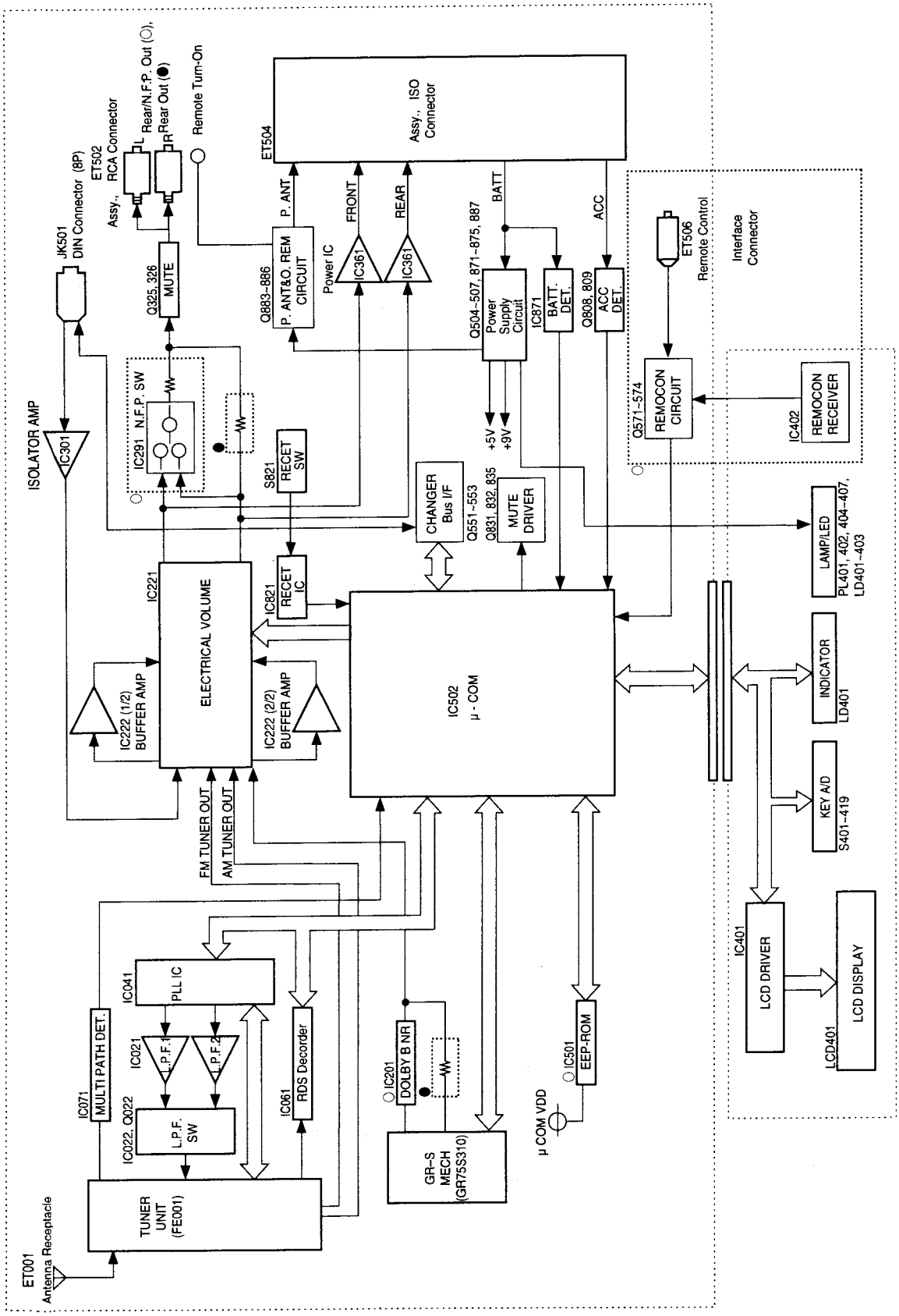
Pin No.	41	42	43	44	45	46	47	48	49	50
COM.1		11d	11e	10c	10e	9c	8e	7c	7e	6c
COM.2		11h, l	11f	10b	10f	9b	8f	7b	7f	6b
COM.3	COM.3	11a		NEWS	B.S.	SEEK	8a	DX	MTL	M.I.X.

51	52	53	54	55	56	57	58	59	60

61	62	63	64	65	66	67	68	69	70

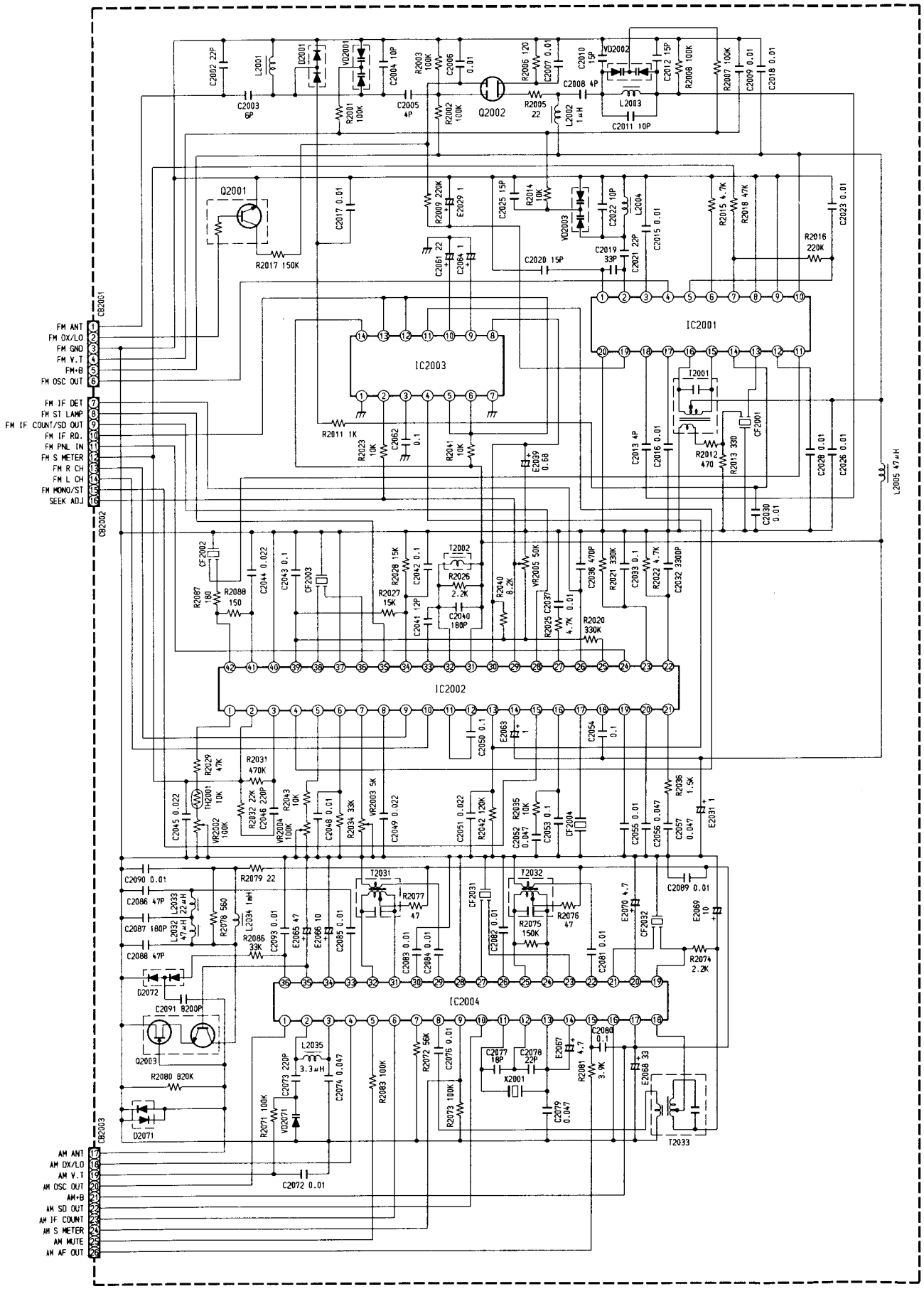
71	72	73	74	75	76
6d	5e		T.INFO	4e	2c
6h, l	5f	ALL	TP	3b, c	LOUD
6a	5a	RPT		3n, j	2b

Block Diagram



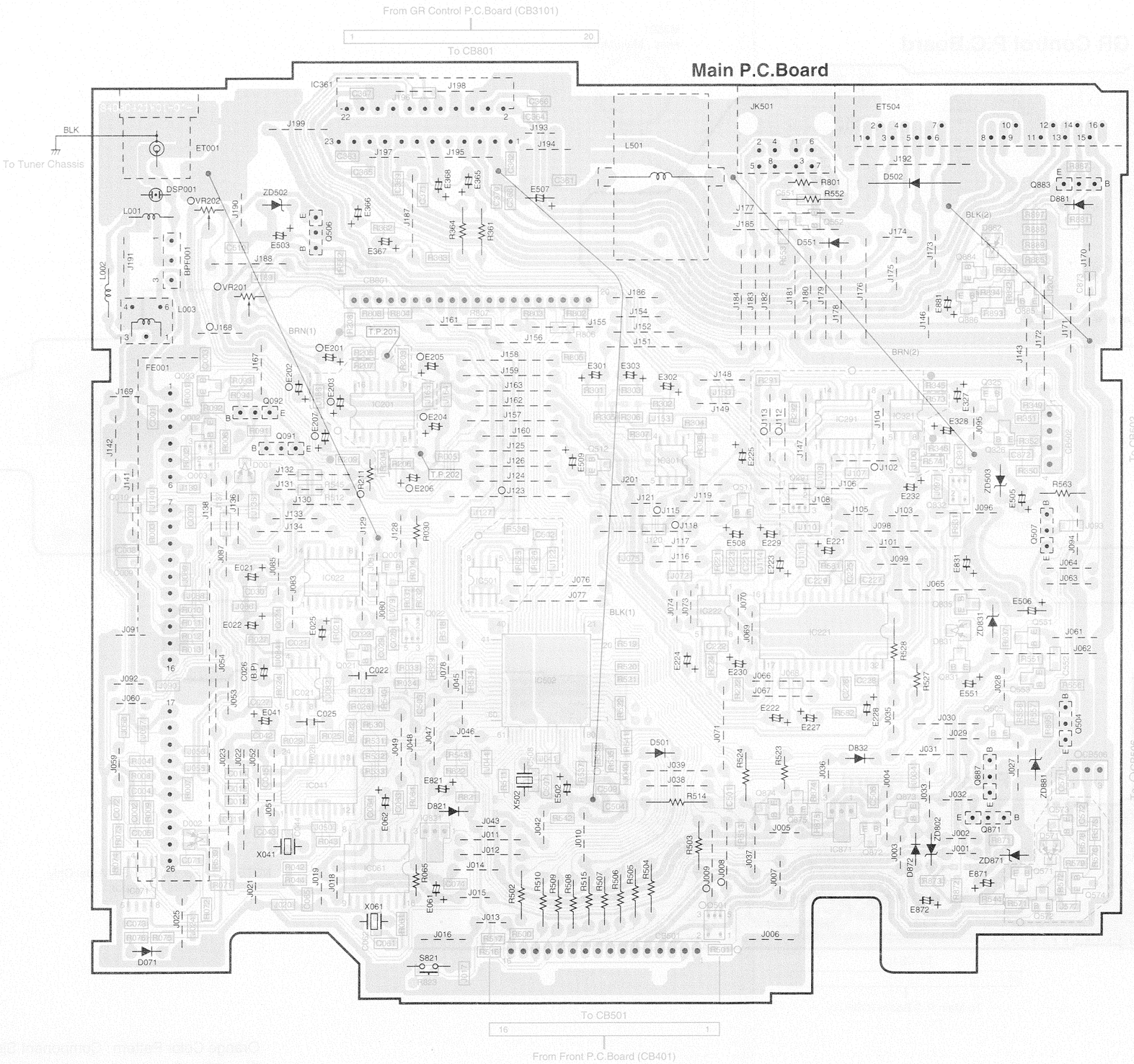
NOTE: ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common

Tuner Schematic Diagram

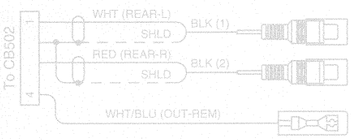


Parts Layout on P.C. Boards and Wiring Diagram (1/2)

All P.C. Boards viewed from soldered side.



ET502
Assy., RCA Connector



Rear/N.F.P. Out (○), Rear Out (●)

Remote Turn-On

○ ET506
Remote Control Interface Connector

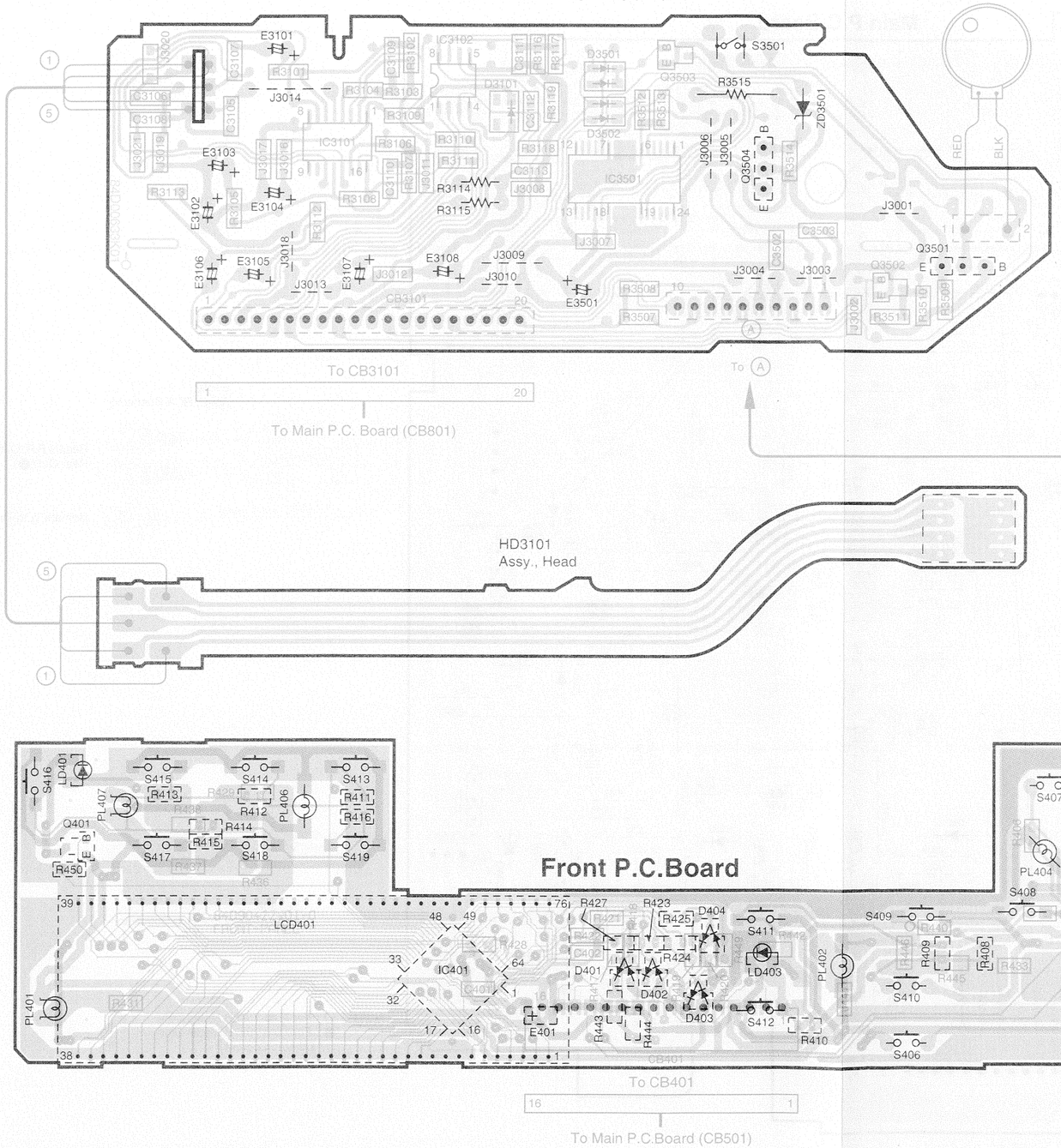
NOTE : ○ : For TDM-7548R Model Only
● : For TDM-7547R Model Only
Others : Common

Blue Color Pattern : Foil Side Pattern

Parts Layout on P.C. Boards and Wiring Diagram (2/2)

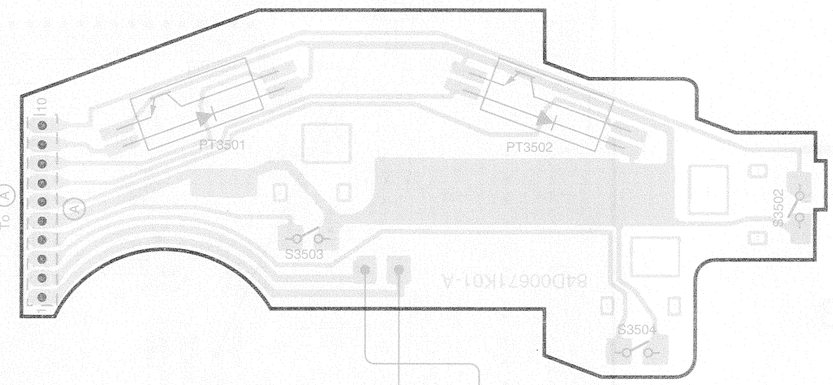
All P.C. Boards viewed from soldered side.

GR Control P.C.Board



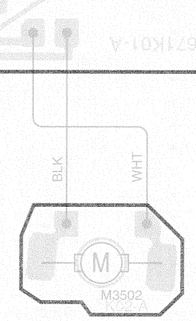
M3501 Assy., Main Motor

Photo P.C.Board

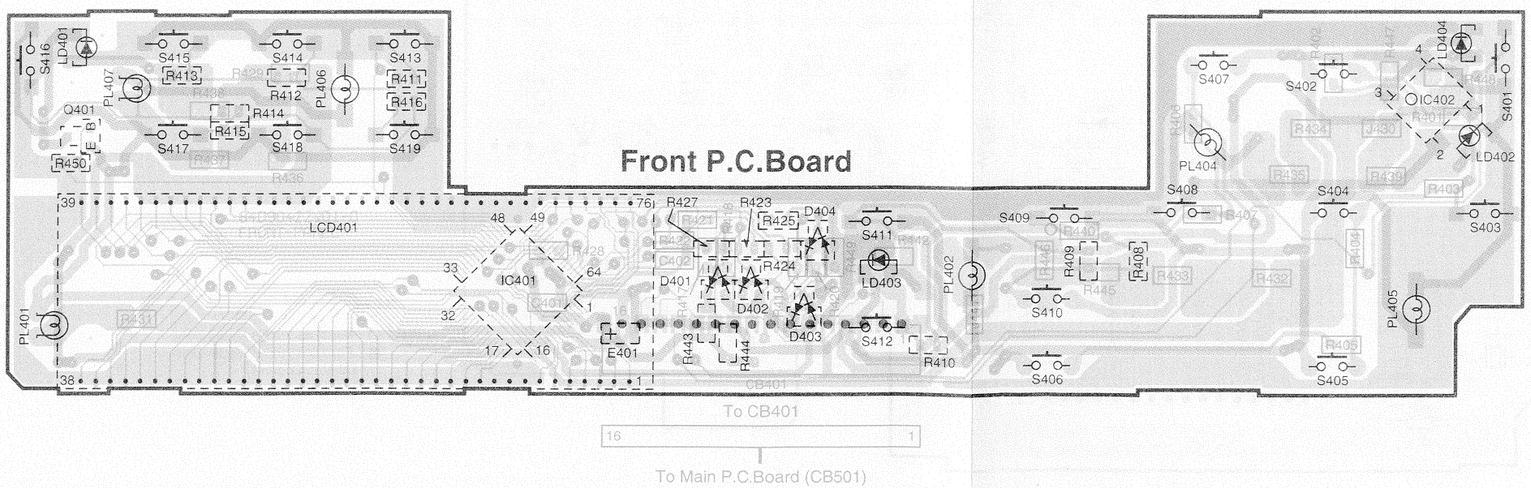


HD3101 Assy., Head

M3502 Assy., Fan



Front P.C.Board

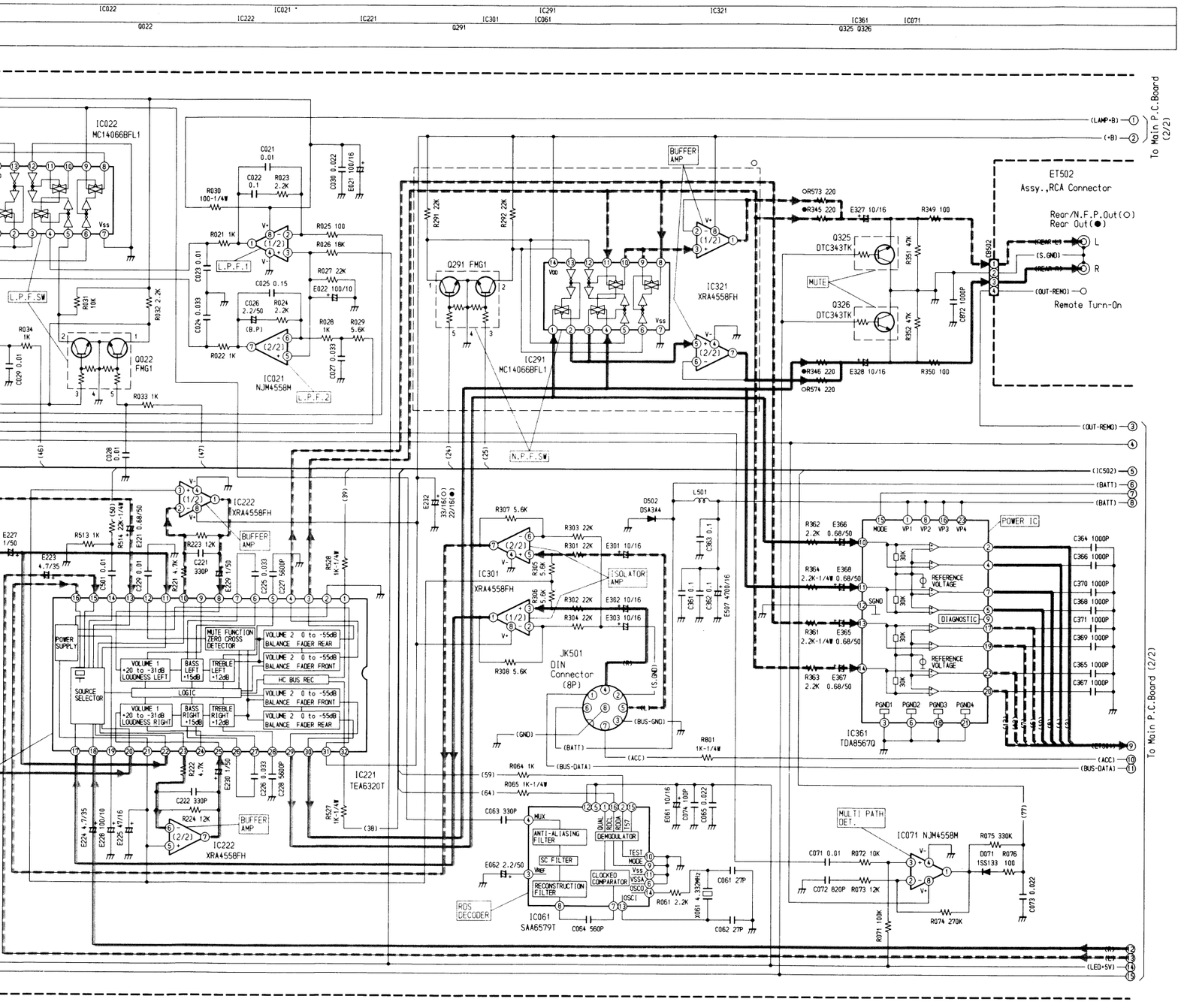


NOTE : ○ : For TDM-7548R Model Only
Others : Common

Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Schematic Diagram (1/3)

| IC | | |



IC021

1	11.3V	
2	2.77V/ 0.5V	AF (RDS, SOURCE) SW ON/ OFF
3	2.77V	
4	0V	
5, 6	2.77V	
7	4.92V	
8	13.57V	

IC022

1~3	4.92V	
4	13.18V	
5	13.16V/ 0V	AF (RDS, SOURCE) SW ON/ OFF
6	13.69V	
7	0V	
8, 9	2.47V	
10, 11	NC	
12	0V	
13	0V/ 12.47V	AF (RDS, SOURCE) SW ON/ OFF
14	13.71V	

IC041

1	PS	Power ON
2~4	0V/PS	Power ON/ SEEK
5	5.05V/ PS	Power ON/ SEEK
6	0V	
7	5.05V	
8	0V	
9~14	NC	
15, 16	0V	
17	NC	
18	0V/ PS	FM/ AM
19	2.63V/ 0V	FM/ AM
20	5.07V	
21	1.9V	
22	2.78V	
23	0V	
24	PS	

IC061

1	NC	
2	PS	
3	2.53V	
4	2.52V	
5	5.06V	
6	0V	
7	2.51V	
8	2.56V	
9~11	0V	
12	5.06V	
13, 14	PS	
15	NC	
16	PS	

IC071

1	5.06V	
2	5.07V	
3	5.02V	
4	0V	
5~7	NC	
8	8.88V	

IC221

1	0V/ PS	Power ON/ VOL UP / Down SEEK SW ON	21	4.4V	
2	0V		22	4.39V	
3	4.4V		23	4.4V	
4~7	4.39V		24	NC	
8	4.33V		25	4.33V	
9	NC		26	4.39V	
10, 11	4.39V		27	4.4V	
12	8.7V		28	0V	
13~15	4.38V		29	4.39V	
16, 17	4.39V		30	4.4V	
18	4.38V		31	8.75V	
19	8.68V		32	0V/ PS	Power ON/ VOL UP / Down SEEK SW ON
20	4.38V				

IC222

1	4.42V
2, 3	4.43V
4	0V
5	4.42V
6	4.43V
7	4.42V
8	8.82V

○ IC291

1~4	4.43V	
5	8.8V/ 0V	Power ON/ NFP ON FADER-Fch
6	0V/ 8.8V	Power ON/ NFP ON FADER-Fch
7	0V	
8	4.42V	
9	4.43V	
10, 11	4.42V	
12	8.8V/ 0V	Power ON/ NFP ON FADER-Fch
13	0V/ 8.8V	Power ON/ NFP ON FADER-Fch
14	8.82V	

IC301

1~3	4.42V	
4	0V	
5~7	4.42V	
8	8.82V	

○ IC321

1~3	4.42V	
4	0V	
5~7	4.42V	
8	8.82V	

IC361

1	14.24V	13, 14	2.12V	
2	7.09V	15	14.09V	
3	0V	16	14.24V	
4	7.1V	17	7.08V	
5	7.06V	18	0V	
6	0V	19	7.1V	
7	7.06V	20	7.13V	
8	14.24V	21	0V	
9	NC	22	7.13V	
10, 11	2.12V	23	14.24V	
12	0V			

Q003

1	0V/ 8.32V	AM/ AM SEEK
2	8.59V/ 0V	FM/ FM SEEK
3	0V/ 6.12V	FM/ FM SEEK
4	0V	
5	4.42V/ 0V	Power ON/ SEEK

	E	C	B	MODE
Q001	0V	13.68V	0V	
Q002	0V	0V/ 6.14V	4.44V/ 0V	Power ON/ SEEK
Q021	0V	0.4V/ 0V	0V/ 4.97V	Power ON/ LW
Q091	8.89V/ 8.92V	8.82V/ 0V	8.18V/ 8.83V	AM/ FM
Q092	8.87V/ 8.92V	1.241V/ 8.84V	8.86V/ 8.19V	AM/ FM
Q093	0V	8.86V/ 0V	0V/ 5.2V	AM/ FM
Q325	0V	0V	14.1V/ 0.1V	MUTE ON/ OFF
Q326	0V	0V	14.1V/ 0.1V	MUTE ON/ OFF
Q511	0V	0V	14.07V/ 0V	MUTE ON/ OFF
Q512	0V	0V	14.03V/ 0V	MUTE ON/ OFF

		1	2	3	4	5	MODE
	Q022	12.21V/ 0V	0V/ 12.84V	12.17V/ 0V	0V	0V/ 4.95V	Power ON/ TAPE PLAY
○	Q291	8.75V/ 0V	0V/ 8.73V	5.16V/ 0V	0V	0V/ 5.16V	PowerON/ SUB-W ON FADER Rch +

<Measuring Conditions>

1. Power Supply Voltage : DC14.4V
2. Measuring Meter : Digital Multi Meter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
   FM : 98.1MHz
   AM : 999kHz (MW)
   TAPE: Blank Tape Play

NOTE: ○ : For TDM-7548R Model Only,
● : For TDM-7647R Model Only,
Others : Common.

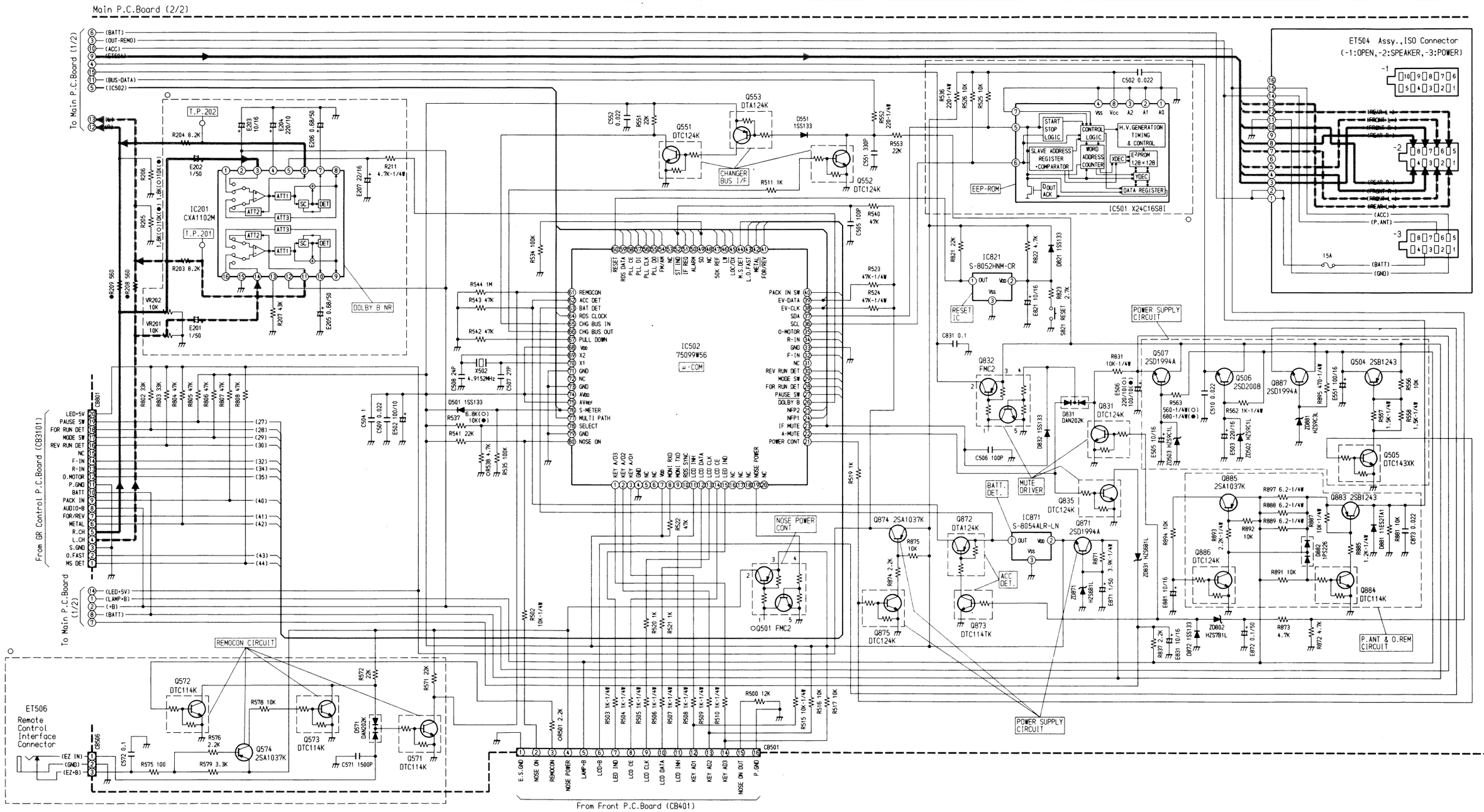
NOTE:

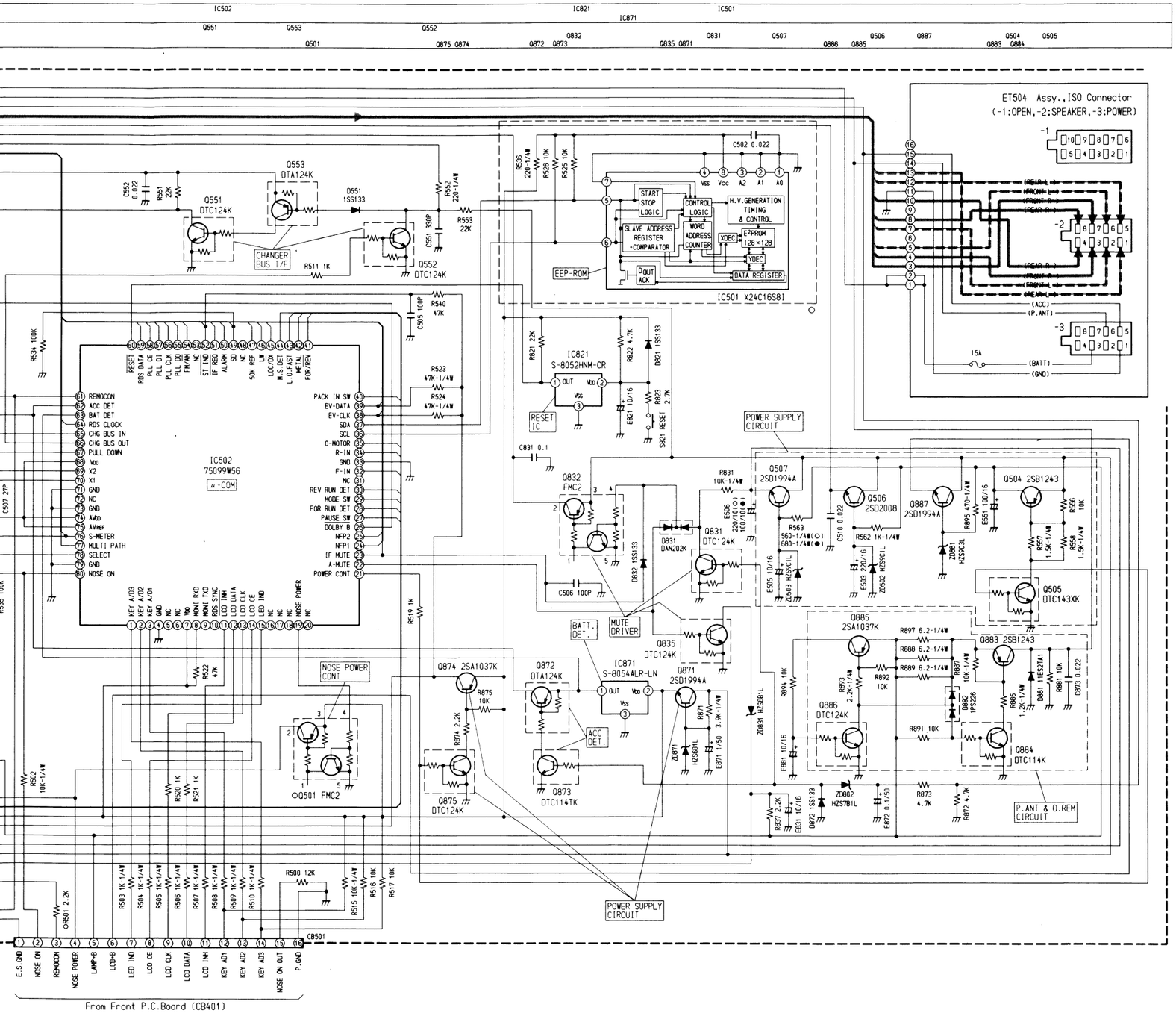
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1{,}000{,}000}$

TDM-7548R/
TDM-7547R
TDM-7548R/
TDM-7547R

Schematic Diagram (2/3)

IC	IC201				IC502			IC821	IC871	IC501																	
Transistor (Q)	Q572	Q574	Q573	Q571	Q551	Q553	Q501	Q552	Q875	Q874	Q872	Q832 Q873	Q835	Q871	Q831	Q507	Q886	Q885	Q506	Q887	Q883	Q884	Q504	Q505





○ IC201

1	NC	TAPE PLAY
2	8.73V	TAPE PLAY
3, 4	4.44V	TAPE PLAY
5	5.17V/ 0V	DOLBY ON/ OFF
6	4.54V	TAPE PLAY
7	0V	TAPE PLAY
8, 9	NC	TAPE PLAY
10	0V	TAPE PLAY
11	4.58V	TAPE PLAY
12	8.75V	TAPE PLAY
13	1.19V	TAPE PLAY
14	4.43V	TAPE PLAY
15	0V	TAPE PLAY
16	NC	TAPE PLAY

○ IC501

1-7	0V
8	4.98V

IC821

1, 2	5.18V
3	0V

IC871

1	4.95V
2	5.19V
3	0V

IC502

1-3	5.19V		44	5.05V	
4	0V		45	0V/ 5.1V	DX SEEK/ Local SEEK
5, 6	NC		46	0V/ 5.18V	PowerON/ LW
7	5.2V		47	0V/ 5.17V	PowerON/ TAPE PLAY
8	5.18V		48	NC	
9	PS		49	4.51V	
10	0V		50	0V	
11	5.19V		51	5.06V/ 0V	Power ON/ SEEK
12-14	PS		52	5.05V	
15	5.18V		53	NC	
16-18	NC		54	5.18V/ 0V	FM/AM
19	○ 5.18V		55	5.05V/ PS	Power ON/ SEEK
	● NC		56-58	0V/ PS	Power ON/ SEEK
20	NC		59	PS	
21	5.16V		60	5.18V	
22	5.17V/ 0V	MUTE ON/ OFF	61	○ PS/ PS ● 0V/ 0V	Power ON/ REMOCON ON
23	0V				
24	0V/ 5.19V	Power ON/ NFP ON FADER Fch	62	4.76V	
25	5.18V/ 0V	Power ON/ NFP ON FADER Fch	63	4.96V	
26	0V/ 5.19V	TAPE PLAY DOLBY ON/ OFF	64	PS	
27	5.17V/ 0V	TAPE PLAY/ PAUSE	65	5.11V/ PS	Power ON/ CD CHG
28	4.48V/ PS	Power ON/ TAPE PLAY	66	0V/ PS	
29	PS/ 5.18V	SOURCE (BAND) SW ON/ OFF	67	0V	
30	4.48V/ PS	Power ON/ TAPE PLAY	68	5.21V	
31	NC		69, 70	PS	
32	0V/ PS	TAPE PLAY/ BAND SW ON	71	0V	
33	0V		72	NC	
34	0V/ PS	TAPE PLAY/ BAND SW ON	73	0V	
35	0V/ 5.17V	Power ON/ TAPE PLAY	74	5.22V	
36, 37	○ 0V		75	5.21V	
	● NC		76	4.03V	
38, 39	0V/ PS	Power ON/ VOL UP/ Down SEEK SW ON	77	4.93V	
40	5.17V/ 0V	PACK IN/ OUT	78	○ 2.16V ● 5.22V	
41	5.18V/ 0V	PATE PLAY FOR/REV			
42	5.05V	METEL	79	0V	
43	0V		80	2.61V	

		E	C	B	MODE
	Q504	14.2V	14.13V	13.51V	
	Q505	0V	0V/ 14.42V	4.24V/ 0V	Power ON/ OFF
	Q506	8.93V	14.21V	9.49V	
	Q507	8.83V	14.2V	9.44V	
	Q551	0V	PS/ PS	PS/ PS	Power ON/ CD CHG
	Q552	0V	PS/ PS	PS/ PS	Power ON/ CD CHG
	Q553	5.21V	PS/ PS	PS/ PS	Power ON/ CD CHG
○	Q571	0V	PS/ PS	PS/ PS	Power ON/ REMOCON ON
○	Q572	0V	PS/ 0V	PS/ PS	Power ON/ REMOCON ON
○	Q573	0V	PS/ 0V	0V/ 2.79V	Power ON/ REMOCON ON
○	Q574	5.13V	0V/ 5.11V	4.98V/ 4.5V	Power ON/ REMOCON ON
	Q831	0V	0V	4.52V	
	Q835	0V	0V/ 9.45V	5.18V/ 0V	MUTE ON/ OFF
	Q871	5.2V	14.2V	5.75V	
	Q872	4.89V/ 5.16V	4.85V/ 0V	0V/ 5.15V	Power ON/ BATT
	Q873	0V	0V/ 5.26V	4.56V/ 0V	Power ON/ BATT
	Q874	5.2V	5.08V	4.42V	
	Q875	0V	0V	4.24V	
	Q883	12.52V/ 14V	12.45V/ 0V	11.6V/ 13.98V	P. ANT. O. REM/ 500mA OVER
	Q884	0V	0V/ 13.95V	7.01V/ 0.647V	P. ANT. O. REM/ 500mA OVER
	Q885	13.74V/ 13.64V	0.449V/ 13.96V	13.28V/ 13.21V	P. ANT. O. REM/ 500mA OVER
	Q886	0V	13.18V/ 0V	0.618V/ 9.57V	P. ANT. O. REM/ 500mA OVER
	Q887	9.38V	14.12V	9.95V	

		1	2	3	4	5	MODE
○	Q501	NC	5.14V	5.19V	5.17V	0V	
	Q832	NC	13.9V/ 01V	14.08V	4.65V/ 0V	0V	MUTE ON/ OFF

<Measuring Conditions>

1. Power Supply Voltage : DC14.4V
2. Measuring Meter : Digital Multi Meter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
   FM : 98.1MHz
   AM : 999kHz (MW)
   TAPE: Blank Tape Play

NOTE: ○ : For TDM-7548R Model Only,
● : For TDM-7647R Model Only,
Others : Common.

NOTE:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Schematic Diagram (3/3)

IC	IC402	IC401	IC3102 IC3101
Transistor (Q,PT)		Q401	PT3501 PT3502 Q3503

Front P.C.Board

GR Control P.C.Board

IC402 RS-31

REMOCON IC

FIRST AMP LIMITER

DETECTOR

IC401 LC75850W

LCD401 LCD Display

IC3102 BA3703F

IC3101 TA7705F

HD3101 Assy.,Head

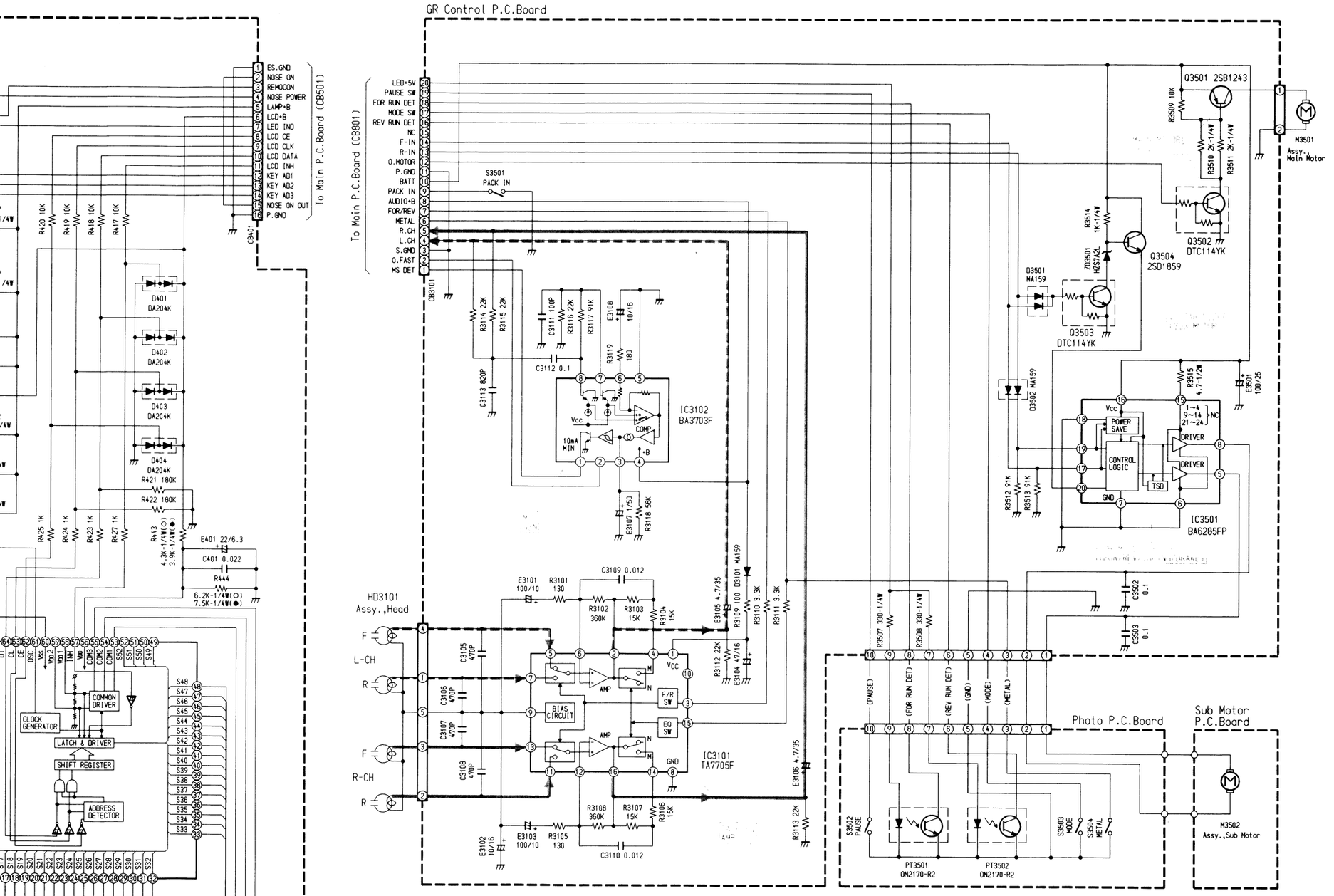
To Main P.C.Board (CB501)

To Main P.C.Board (CB801)

Photo P.C.Bo

IC3102
IC3101
IC3501
Q3504 Q3502 Q3501
Q3503
PT3501 PT3502

GR Control P.C.Board



IC401 ○ IC402

1~48	PS
49~52	NC
53~55	PS
56, 57	5.18V
58, 59	NC
60	0V
61~64	PS

1	4.98V
2	PS
3, 4	0V

	E	C	B	MODE
Q401	0V	0V/ 12.5V	4.76V/ 0V	LD401 ON/ OFF

<Measuring Conditions>
1. Power Supply Voltage : DC14.4V
2. Measuring Meter : Digital Multi Meter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
   FM : 98.1MHz
   AM : 999kHz (MW)
   TAPE: Blank Tape Play

IC3101

1	10.7V	9	3V
2	3.1V	10	NC
3	5.2V	11~13	3V
4	3.1V	14	3.1V
5~7	3V	15	0V
8	0V	16	3.1V

IC3102

1	5.2V
2, 3	0V
4	12V
5	0V
6	0.6V
7, 8	0V

IC3501

1~4	NC
5~8	0V
9~14	NC
15, 16	12V
17~19	0V
20	12V
21~24	NC

	E	C	B	MODE
Q3501	12V	11.8V	11.3V	
Q3502	0V	0.1V	5V	
Q3503	0V	5.5V	0V	
Q3504	11.6V	12V	12V	

[Measuring Conditions]
- Power Supply Voltage : DC12V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : Tape ..... Blank

NOTE: ○ : For TDM-7548R Model Only,
● : For TDM-7647R Model Only,
Others : Common.

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

TDM-7548R/
TDM-7547R

TDM-7548R/
TDM-7547R

Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.
Capacitor : μF=microfarads,pF=picofarads

Abbreviations

RES.= Resistor	CAP.= Capacitor
C.F.= Carbon Film	ELY.= Electrolytic
M.F.= Metal Film	CER.= Ceramic
M.O.= Metal Oxide Film	MYL.= Mylar
M.P.= Metal Plate	TAN.= Tantalum
TR. = Transistor	POLY.= Polystyrol
TRANS.= Transformer	PP. = Polypropylene
CP. = Chip	PLT.= Polyethylene
	PF. = Polyester Film

	Symbol No.	Part No.	Description
	Main P.C.Board		
	IC's		
	IC021	51T93336F01	NJM4558M
	IC022	51T40941U03	MC14066BFL1
	IC041	51T85265W02	LC72191JM
	IC061	51T55054W02	SAA6579T
	IC071	51T93336F01	NJM4558M
○	IC201	51T11210W01	CXA1102M
	IC221	51T65131W01	TEA6320T
	IC222	51T65379F22	XRA4558FH
○	IC291	51T40941U03	MC14066BFL1
	IC301	51T65379F22	XRA4558FH
○	IC321	51T65379F22	XRA4558FH
	IC361	51T95038W01	TDA8567Q
○	IC501	51T85304W01	X24C16S8I
	IC502	51T75099W56	75099W56
	IC821	51T95014F13	S-8052HNM-CR
	IC871	51T95014F09	S-8054ALR-LN
	Transistors		
	Q001	48T62967F03	CP., DTC124K
	Q002	48T62967F03	CP., DTC124K
	Q003	48T73888F08	CP., FMG1
	Q021	48T62967F03	CP., DTC124K
	Q022	48T73888F08	CP., FMG1
	Q091	48T84234F03	2SB1238
	Q092	48T84234F03	2SB1238
	Q093	48T62967F03	CP., DTC124K
○	Q291	48T73888F08	CP., FMG1
	Q325	48T62967F33	CP., DTC343TK
	Q326	48T62967F33	CP., DTC343TK
○	Q501	48T73888F12	CP., FMC2
	Q504	48T84366F01	2SB1243
	Q505	48T62967F05	CP., DTC143XK
	Q506	48T15289W04	2SD2008
	Q507	48T93828F01	2SD1994A
	Q511	48T62967F21	CP., DTC124TK
	Q512	48T62967F21	CP., DTC124TK
	Q551	48T62967F03	CP., DTC124K
	Q552	48T62967F03	CP., DTC124K
	Q553	48T62966F03	CP., DTA124
○	Q571	48T62967F02	CP., DTC114K
○	Q572	48T62967F02	CP., DTC114K
○	Q573	48T62967F02	CP., DTC114K
○	Q574	48T63420F01	CP., 2SA1037K
	Q831	48T62967F03	CP., DTC124K
	Q832	48T73888F12	CP., FMC2
	Q835	48T62967F03	CP., DTC124K
	Q871	48T93828F01	2SD1994A
	Q872	48T62966F03	CP., DTA124
	Q873	48T62967F09	CP., DTC114TK
	Q874	48T63420F01	CP., 2SA1037K
	Q875	48T62967F03	CP., DTC124K
	Q883	48T84366F04	2SB1243
	Q884	48T62967F02	CP., DTC114K
	Q885	48T63420F01	CP., 2SA1037K
	Q886	48T62967F03	CP., DTC124K
	Q887	48T93828F01	2SD1994A
	Diodes/Surge Protector		
	D001	48T52446F01	CP., MA151WK
	D002	48T52446F01	CP., MA151WK
	D071	48T68828F01	1SS133
	D501	48T68828F01	1SS133
	D502	48T68580F02	DSA3A4
	D551	48T68828F01	1SS133
○	D571	48T63462F01	CP., DAN202K
	D821	48T68828F01	1SS133
	D831	48T63462F01	CP., DAN202K
	D832	48T68828F01	1SS133
	D872	48T68828F01	1SS133
	D881	48T84052F01	11ES2TA1
	D882	48T85357W01	CP., 1PS226
	ZD502	48T83128F25	Zener, HZS9C1L
	ZD503	48T83128F25	Zener, HZS9C1L
	ZD802	48T83128F13	Zener, HZS7B1L
	ZD831	48T83128F04	Zener, HZS6B1L
	ZD871	48T83128F04	Zener, HZS6B1L
	ZD881	48T83128F27	Zener, HZS9C3L
	DSP001	48T81048F02	Surge Protector, DSP-201M

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

	Symbol No.	Part No.	Description
	Coils/Filter		
	L001	24T70381F17	Inductor, 4.7μH
	L002	24T70381F23	Inductor, 15μH
	L003	24T94308F01	Inductor, 100mH
	L501	24T75055W06	Choke
	BPF001	91T75257W02	Filter, LPF11830KH
	Switch		
	S821	40T75104W01	Tact, SKHLLB (RESET)
	Crystals		
	X041	91T85169W43	7.2MHz
	X061	91T45118W18	4.332MHz
	X502	91T85169W27	4.9152MHz
	Capacitors		
	C001	08S35374W01	CP., 0.1μF
	C002	08S65128F69	CP., 0.01μF
	C003	08S82122F37	CP., 100pF
	C004	08S53332F35	CP., 1000pF
	C005	08T15399W03	CP., 0.047μF
	C007	08S35374W01	CP., 0.1μF
	C008	08T15399W01	CP., 0.022μF
	C009	08T15399W01	CP., 0.022μF
	C010	08S53332F35	CP., 1000pF
	C011	08S53332F35	CP., 1000pF
	C012	08S82122F37	CP., 100pF
	C013	08S65128F57	CP., 1000pF
	C014	08S82122F37	CP., 100pF
	C021	08S65128F69	CP., 0.01μF
	E021	23S75373W06	ELY., 100μF / 16V
	C022	08T55390W29	TF, 0.1μF
	E022	23S75372W02	ELY., 100μF / 10V
	C023	08S65128F69	CP., 0.01μF
	C024	08T15399W02	CP., 0.033μF
	C025	08T55390W31	TF, 0.15μF
	E025	23S75372W14	ELY., 0.68μF / 50V
	C026	23S82372F19	ELY., (B.P) 2.2μF / 50V
	C027	08T15399W02	CP., 0.033μF
	C028	08S65128F69	CP., 0.01μF
	C029	08S65128F69	CP., 0.01μF
	C030	08T15399W01	CP., 0.022μF
	E041	23S75372W05	ELY., 22μF / 16V
	C042	08T15399W01	CP., 0.022μF
	C043	08S82122F21	CP., 22pF
	C044	08S82122F19	CP., 18pF
	C045	08S35374W01	CP., 0.1μF
	C061	08S82122F23	CP., 27pF
	E061	23S75372W04	ELY., 10μF / 16V
	C062	08S82122F23	CP., 27pF
	E062	23S75372W16	ELY., 2.2μF / 50V
	C063	08S82122F49	CP., 330pF
	C064	08S65128F53	CP., 560pF
	C065	08T15399W01	CP., 0.022μF
	C071	08S65128F69	CP., 0.01μF
	C072	08S65128F56	CP., 820pF
	C073	08T15399W01	CP., 0.022μF
	C074	08S82122F37	CP., 100pF
○	E201	23S75372W15	ELY., 1μF / 50V
○	E202	23S75372W15	ELY., 1μF / 50V
○	E203	23S75372W04	ELY., 10μF / 16V
○	E204	23S75372W03	ELY., 220μF / 10V
○	E205	23S75372W14	ELY., 0.68μF / 50V
○	E206	23S75372W14	ELY., 0.68μF / 50V
○	E207	23S75372W05	ELY., 22μF / 16V
	C221	08S53332F29	CP., 330pF
	E221	23S75372W14	ELY., 0.68μF / 50V
	C222	08S65128F47	CP., 330pF
	E222	23S75372W14	ELY., 0.68μF / 50V
	E223	23S75372W09	ELY., 4.7μF / 35V
	E224	23S75372W09	ELY., 4.7μF / 35V
	C225	08T15399W02	CP., 0.033μF
	E225	23S75372W07	ELY., 47μF / 16V
	C226	08T15399W02	CP., 0.033μF
	C227	08S53332F44	CP., 5600pF
	E227	23S75372W15	ELY., 1μF / 50V
	C228	08S65128F66	CP., 5600pF
	E228	23S75372W02	ELY., 100μF / 10V
	C229	08S53332F47	CP., 0.01μF
	E229	23S75372W15	ELY., 1μF / 50V
	E230	23S75372W15	ELY., 1μF / 50V
○	E232	23S75372W06	ELY., 33μF / 16V
●	E232	23S75372W05	ELY., 22μF / 16V
	E301	23S75372W04	ELY., 10μF / 16V
	E302	23S75372W04	ELY., 10μF / 16V
	E303	23S75372W04	ELY., 10μF / 16V
	E327	23S75372W04	ELY., 10μF / 16V
	E328	23S75372W04	ELY., 10μF / 16V
	C361	08T15807W05	CP., 0.1μF
	C362	08S65128F76	CP., 0.1μF
	C363	08S65128F76	CP., 0.1μF
	C364	08S53332F35	CP., 1000pF
	C365	08S	
	E365	23S	
	C366	08S	
	E366	23S	
	C367	08S	
	E367	23S	
	C368	08S	
	E368	23S	
	C369	08S	
	C370	08S	
	C371	08S	
	C501	08S	
○	C502	08T	
	E502	23S	
	E503	23T	
	C504	08T	
	C505	08S	
	E505	23S	
	C506	08S	
○	E506	23T	
●	E506	23T	
	C507	08S	
	E507	23T	
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	C509	08T	
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	C510	08T	
	C551	08S	
	E551	23S	
	C552	08T	
○	C571	08S	
○	C572	08S	
	E821	23S	
	C831	08T	
	E831	23S	
	E871	23S	
	C872	08S	
	E872	23S	
	C873	08T	
	E881	23S	
	Resistors		
	R001	06S	
	R002	06S	
	R003	06S	
	R004	06S	

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

NOTE : ○

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SP-201M

Symbol No.	Part No.	Description
Coils/Filter		
L001	24T70381F17	Inductor, 4.7µH
L002	24T70381F23	Inductor, 15µH
L003	24T94308F01	Inductor, 100mH
L501	24T75055W06	Choke
BPF001	91T75257W02	Filter, LPF11830KH
Switch		
S821	40T75104W01	Tact, SKHLLB (RESET)
Crystals		
X041	91T85169W43	7.2MHz
X061	91T45118W18	4.332MHz
X502	91T85169W27	4.9152MHz
Capacitors		
C001	08S35374W01	CP., 0.1µF
C002	08S65128F69	CP., 0.01µF
C003	08S82122F37	CP., 100pF
C004	08S53332F35	CP., 1000pF
C005	08T15399W03	CP., 0.047µF
C007	08S35374W01	CP., 0.1µF
C008	08T15399W01	CP., 0.022µF
C009	08T15399W01	CP., 0.022µF
C010	08S53332F35	CP., 1000pF
C011	08S53332F35	CP., 1000pF
C012	08S82122F37	CP., 100pF
C013	08S65128F57	CP., 1000pF
C014	08S82122F37	CP., 100pF
C021	08S65128F69	CP., 0.01µF
E021	23S75373W06	ELY., 100µF / 16V
C022	08T55390W29	TF, 0.1µF
E022	23S75372W02	ELY., 100µF / 10V
C023	08S65128F69	CP., 0.01µF
C024	08T15399W02	CP., 0.033µF
C025	08T55390W31	TF, 0.15µF
E025	23S75372W14	ELY., 0.68µF / 50V
C026	23S82372F19	ELY., (B.P) 2.2µF / 50V
C027	08T15399W02	CP., 0.033µF
C028	08S65128F69	CP., 0.01µF
C029	08S65128F69	CP., 0.01µF
C030	08T15399W01	CP., 0.022µF
E041	23S75372W05	ELY., 22µF / 16V

Symbol No.	Part No.	Description
C042	08T15399W01	CP., 0.022µF
C043	08S82122F21	CP., 22pF
C044	08S82122F19	CP., 18pF
C045	08S35374W01	CP., 0.1µF
C061	08S82122F23	CP., 27pF
E061	23S75372W04	ELY., 10µF / 16V
C062	08S82122F23	CP., 27pF
E062	23S75372W16	ELY., 2.2µF / 50V
C063	08S82122F49	CP., 330pF
C064	08S65128F53	CP., 560pF
C065	08T15399W01	CP., 0.022µF
C071	08S65128F69	CP., 0.01µF
C072	08S65128F56	CP., 820pF
C073	08T15399W01	CP., 0.022µF
C074	08S82122F37	CP., 100pF
○ E201	23S75372W15	ELY., 1µF / 50V
○ E202	23S75372W15	ELY., 1µF / 50V
○ E203	23S75372W04	ELY., 10µF / 16V
○ E204	23S75372W03	ELY., 220µF / 10V
○ E205	23S75372W14	ELY., 0.68µF / 50V
○ E206	23S75372W14	ELY., 0.68µF / 50V
○ E207	23S75372W05	ELY., 22µF / 16V
C221	08S53332F29	CP., 330pF
E221	23S75372W14	ELY., 0.68µF / 50V
C222	08S65128F47	CP., 330pF
E222	23S75372W14	ELY., 0.68µF / 50V
E223	23S75372W09	ELY., 4.7µF / 35V
E224	23S75372W09	ELY., 4.7µF / 35V
C225	08T15399W02	CP., 0.033µF
E225	23S75372W07	ELY., 47µF / 16V
C226	08T15399W02	CP., 0.033µF
C227	08S53332F44	CP., 5600pF
E227	23S75372W15	ELY., 1µF / 50V
C228	08S65128F66	CP., 5600pF
E228	23S75372W02	ELY., 100µF / 10V
C229	08S53332F47	CP., 0.01µF
E229	23S75372W15	ELY., 1µF / 50V
E230	23S75372W15	ELY., 1µF / 50V
○ E232	23S75372W06	ELY., 33µF / 16V
● E232	23S75372W05	ELY., 22µF / 16V
E301	23S75372W04	ELY., 10µF / 16V
E302	23S75372W04	ELY., 10µF / 16V
E303	23S75372W04	ELY., 10µF / 16V
E327	23S75372W04	ELY., 10µF / 16V
E328	23S75372W04	ELY., 10µF / 16V
C361	08T15807W05	CP., 0.1µF
C362	08S65128F76	CP., 0.1µF
C363	08S65128F76	CP., 0.1µF
C364	08S53332F35	CP., 1000pF

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

Symbol No.	Part No.	Description
C365	08S65128F57	CP., 1000pF
E365	23S75372W14	ELY., 0.68µF / 50V
C366	08S65128F57	CP., 1000pF
E366	23S75372W14	ELY., 0.68µF / 50V
C367	08S65128F57	CP., 1000pF
E367	23S75372W14	ELY., 0.68µF / 50V
C368	08S65128F57	CP., 1000pF
E368	23S75372W14	ELY., 0.68µF / 50V
C369	08S53332F35	CP., 1000pF
C370	08S53332F35	CP., 1000pF
C371	08S65128F57	CP., 1000pF
C501	08S53332F47	CP., 0.01µF
○ C502	08T15399W01	CP., 0.022µF
E502	23S75372W02	ELY., 100µF / 10V
E503	23T75478W12	ELY., 220µF / 10V
C504	08T55610W01	CP., 1µF
C505	08S82122F37	CP., 100pF
E505	23S75372W04	ELY., 10µF / 16V
C506	08S82122F37	CP., 100pF
○ E506	23T00149L14	ELY., 220µF / 10V
● E506	23T00149L13	ELY., 100µF / 10V
C507	08S82122F23	CP., 27pF
E507	23T75346W02	ELY., 4700µF / 16V
C508	08S82122F22	CP., 24pF
E508	23S75372W14	ELY., 0.68µF / 50V
C509	08T15399W01	CP., 0.022µF
E509	23S75372W14	ELY., 0.68µF / 50V
C510	08T15399W01	CP., 0.022µF
C551	08S82122F49	CP., 330pF
E551	23S75372W08	ELY., 100µF / 16V
C552	08T15399W01	CP., 0.022µF
○ C571	08S65128F59	CP., 1500pF
○ C572	08S35374W01	CP., 0.1µF
E821	23S75372W04	ELY., 10µF / 16V
C831	08T15807W05	CP., 0.1µF
E831	23S75372W04	ELY., 10µF / 16V
E871	23S75372W15	ELY., 1µF / 50V
C872	08S53332F35	CP., 1000pF
E872	23S75372W10	ELY., 0.1µF / 50V
C873	08T15399W01	CP., 0.022µF
E881	23S75372W04	ELY., 10µF / 16V
Resistors		(All resistors are chip 1/10W±5% unless otherwise noted.)
R001	06S53330F53	1K ohm 1/8W
R002	06S64995F77	10K ohm
R003	06S64995F53	1K ohm
R004	06S70072F77	10K ohm 1/4W

Symbol No.	Part No.	Description
R005	06S53330F73	6.8K ohm 1/8W
R006	06S64995F53	1K ohm
R007	06S64995F77	10K ohm
R008	06S53330F81	15K ohm 1/8W
R009	06S64995F85	22K ohm
R010	06S64995F75	8.2K ohm
R011	06S64995F75	8.2K ohm
R012	06S64995F77	10K ohm
R013	06S64995F77	10K ohm
R014	06S64995F77	10K ohm
R021	06S53330F53	1K ohm 1/8W
R022	06S64995F53	1K ohm
R023	06S53330F61	2.2K ohm 1/8W
R024	06S64995F61	2.2K ohm
R025	06S64995F29	100 ohm
R026	06S53330F83	18K ohm 1/8W
R027	06S64995F85	22K ohm
R028	06S64995F53	1K ohm
R029	06S64995F71	5.6K ohm
R031	06S64995F77	10K ohm
R032	06S64995F61	2.2K ohm
R033	06S53330F53	1K ohm 1/8W
R034	06S53330F53	1K ohm 1/8W
R042	06S64995F93	47K ohm
R043	06S64995F53	1K ohm
R044	06S64995F93	47K ohm
R061	06S64995F61	2.2K ohm
R064	06S64995F53	1K ohm
R071	06S53331F02	100K ohm 1/8W
R072	06S64995F77	10K ohm
R073	06S64995F79	12K ohm
R074	06S64996F12	270K ohm
R075	06S64996F14	330K ohm
R076	06S64995F29	100 ohm
R091	06S64995F65	3.3K ohm
R092	06S64995F53	1K ohm
R093	06S70072F61	2.2K ohm 1/4W
R094	06S64995F77	10K ohm
○ R203	06S64995F75	8.2K ohm
○ R204	06S64995F75	8.2K ohm
○ R205	06S64995F59	1.8K ohm
● R205	06S64995F77	10K ohm
○ R206	06S64995F59	1.8K ohm
● R206	06S64995F77	10K ohm
○ R207	06S64995F92	43K ohm
● R208	06S53330F47	560 ohm 1/8W
● R209	06S64995F47	560 ohm
R221	06S53330F69	4.7K ohm 1/8W
R222	06S64995F69	4.7K ohm

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

Symbol No.	Part No.	Description
	R223	06S53330F79	12K ohm 1/8W
	R224	06S64995F79	12K ohm
○	R291	06S64995F85	22K ohm
○	R292	06S64995F85	22K ohm
	R301	06S64995F85	22K ohm
	R302	06S64995F85	22K ohm
	R303	06S64995F85	22K ohm
	R304	06S64995F85	22K ohm
	R305	06T15443W71	5.6K ohm
	R306	06T15443W71	5.6K ohm
	R307	06T15443W71	5.6K ohm
	R308	06T15443W71	5.6K ohm
●	R345	06S64995F37	220 ohm
●	R346	06S64995F37	220 ohm
	R349	06S64995F29	100 ohm
	R350	06S64995F29	100 ohm
	R351	06S64995F93	47K ohm
	R352	06S64995F93	47K ohm
	R362	06S64995F61	2.2K ohm
	R363	06S64995F61	2.2K ohm
	R500	06S64995F79	12K ohm
○	R501	06S64995F61	2.2K ohm
	R511	06S64995F53	1K ohm
	R512	06S53330F53	1K ohm 1/8W
	R513	06S53330F53	1K ohm 1/8W
	R516	06S64995F77	10K ohm
	R517	06S64995F77	10K ohm
	R518	06S64995F53	1K ohm
	R519	06S64995F53	1K ohm
	R520	06S64995F53	1K ohm
	R521	06S64995F53	1K ohm
	R522	06S64995F93	47K ohm
○	R525	06S53330F77	10K ohm 1/8W
○	R526	06S53330F77	10K ohm 1/8W
	R529	06S53330F53	1K ohm 1/8W
	R530	06S64995F53	1K ohm
	R531	06S53330F53	1K ohm 1/8W
	R532	06S53330F53	1K ohm 1/8W
	R533	06S53330F53	1K ohm 1/8W
	R534	06S53331F02	100K ohm 1/8W
	R535	06S64996F02	100K ohm
○	R536	06S70072F37	220 ohm 1/4W
○	R537	06S53330F73	6.8K ohm 1/8W
●	R537	06S53330F77	10K ohm 1/8W
○	R538	06S64995F69	4.7K ohm
	R539	06S64995F53	1K ohm
	R540	06S64995F93	47K ohm
	R541	06S53330F85	22K ohm 1/8W
	R542	06S64995F93	47K ohm

Symbol No.	Part No.	Description
	R543	06S53330F93	47K ohm 1/8W
	R544	06S64996F26	1M ohm
	R545	06S53330F53	1K ohm 1/8W
	R551	06S53330F85	22K ohm 1/8W
	R553	06S53330F85	22K ohm 1/8W
	R556	06S53330F77	10K ohm 1/8W
	R557	06S70072F57	1.5K ohm 1/4W
	R558	06S70072F57	1.5K ohm 1/4W
	R562	06S70072F53	1K ohm 1/4W
○	R571	06S64995F85	22K ohm
○	R572	06S64995F85	22K ohm
○	R573	06S64995F37	220 ohm
○	R574	06S64995F37	220 ohm
○	R575	06S64995F29	100 ohm
○	R576	06S64995F61	2.2K ohm
○	R578	06S64995F77	10K ohm
○	R579	06S64995F65	3.3K ohm
	R581	06S64995F93	47K ohm
	R582	06S64995F93	47K ohm
	R802	06S64995F89	33K ohm
	R803	06S64995F89	33K ohm
	R804	06S64995F93	47K ohm
	R805	06S64995F93	47K ohm
	R806	06S64995F93	47K ohm
	R807	06S64995F93	47K ohm
	R808	06S64995F93	47K ohm
	R821	06S64995F85	22K ohm
	R822	06S64995F69	4.7K ohm
	R823	06S64995F63	2.7K ohm
	R831	06S70072F77	10K ohm 1/4W
	R837	06S64995F61	2.2K ohm
	R871	06S70072F67	3.9K ohm 1/4W
	R872	06S53330F69	4.7K ohm 1/8W
	R873	06S53330F69	4.7K ohm 1/8W
	R874	06S64995F61	2.2K ohm
	R875	06S53330F77	10K ohm 1/8W
	R881	06S53330F77	10K ohm 1/8W
	R885	06S70072F55	1.2K ohm 1/4W
	R887	06S70072F77	10K ohm 1/4W
	R888	06S70072F87	6.2 ohm 1/4W
	R889	06S70072F87	6.2 ohm 1/4W
	R891	06S64995F77	10K ohm
	R892	06S64995F77	10K ohm
	R893	06S70072F61	2.2K ohm 1/4W
	R894	06S64995F77	10K ohm
	R895	06S70072F45	470 ohm 1/4W
	R897	06S70072F87	6.2 ohm 1/4W
○	VR201	18T15356W13	Variable, 10K ohm
○	VR202	18T15356W13	Variable, 10K ohm

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

Symbol No.	Part No.	Description
Front P.C.Board		
IC's		
IC401	51T55492W01	LC75850W
○ IC402	51T55639W01	RS-31
Transistor		
Q401	48T62967F03	CP., DTC124K
Diodes		
D401	48T64134F01	CP., DA204K
D402	48T64134F01	CP., DA204K
D403	48T64134F01	CP., DA204K
D404	48T64134F01	CP., DA204K
LED's		
LD401	48T65477W02	CP., SML-010LTT87 (RED)
LD402	48T65477W02	CP., SML-010LTT87 (RED)
LD403	48T65477W03	CP., SML-010PTT87 (GRN)
LD404	48T65477W02	CP., SML-010LTT87 (RED)
Switches		
S401	40T55656W06	Tact, SKQMAJ (PWR/INTLZ)
S402	40T75234W01	Tact, SKQNAC (AUDIO UP)
S403	40T55656W06	Tact, SKQMAJ (DN/REW)
S404	40T75234W01	Tact, SKQNAC (MODE/LOUD)
S405	40T75234W01	Tact, SKQNAC (AUDIO DN)
S406	40T75234W01	Tact, SKQNAC (TUNE/PLAY/PAUSE/A.ME.)
S407	40T75234W01	Tact, SKQNAC (EJECT)
S408	40T55656W06	Tact, SKQMAJ (UP/FF)
S409	40T55656W06	Tact, SKQMAJ (SOURCE)
S410	40T75234W01	Tact, SKQNAC (BAND/PROGRAM/TITLE (○))
S411	40T55656W06	Tact, SKQMAJ (AF)
S412	40T55656W06	Tact, SKQMAJ (T.INFO)
S413	40T55656W06	Tact, SKQMAJ (1/NEWS/DOLBY (○))
S414	40T55656W06	Tact, SKQMAJ (2/PTY/P.S.DN)
S415	40T55656W06	Tact, SKQMAJ (3/P.S.UP)
S416	40T55656W06	Tact, SKQMAJ (F)
S417	40T55656W06	Tact, SKQMAJ (6/SCAN)
S418	40T55656W06	Tact, SKQMAJ (5/RPT)
S419	40T55656W06	Tact, SKQMAJ (4/M.I.X/B.SKIP)
Lamps		
○ PL401	65T85125W05	9V-100mA
● PL401	65T75231W01	9V-85mA
PL402	65T75233W01	6V-80mA
PL404	65T75233W01	6V-80mA
PL405	65T75233W01	6V-80mA
PL406	65T75233W01	6V-80mA
PL407	65T85350W01	6V-80mA
Capacitors		
C401	08S65128F78	CP., 0.022µF
C402	08S65128F55	CP., 680pF
E401	23T25191W62	ELY., 22µF / 6.3V
Resistors		(All resistors are chip 1/10W±5% unless otherwise noted.)
R401	06S64995F57	1.5K ohm
R402	06S64995F61	2.2K ohm
R403	06S64995F65	3.3K ohm
R404	06S64995F71	5.6K ohm
R405	06S64995F77	10K ohm
R406	06S64995F57	1.5K ohm
R407	06S64995F61	2.2K ohm
R408	06S64995F65	3.3K ohm
R409	06S64995F71	5.6K ohm
R410	06S64995F77	10K ohm
R411	06S64995F57	1.5K ohm
R412	06S64995F61	2.2K ohm
R413	06S64995F65	3.3K ohm
R414	06S64995F71	5.6K ohm
R415	06S64995F77	10K ohm
R416	06S64995F89	33K ohm
R417	06S64995F77	10K ohm
R418	06S64995F77	10K ohm
R419	06S64995F77	10K ohm
R420	06S64995F77	10K ohm
R421	06S64996F08	180K ohm
R422	06S64996F08	180K ohm
R423	06S64995F53	1K ohm
R424	06S64995F53	1K ohm
R425	06S64995F53	1K ohm
R427	06S64995F53	1K ohm

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

Symbol No.	Part No.	Description
	R428	06S64995F93	47K ohm
	R429	06S70072F41	330 ohm 1/4W
	R431	06S70072F09	15 ohm 1/4W
	R432	06S70072F16	30 ohm 1/4W
	R433	06S70072F16	30 ohm 1/4W
	R434	06S70072F14	24 ohm 1/4W
	R435	06S70072F15	27 ohm 1/4W
	R436	06S70072F17	33 ohm 1/4W
	R437	06S70072F17	33 ohm 1/4W
	R438	06S70072F41	330 ohm 1/4W
	R439	06S70072F67	3.9K ohm 1/4W
○	R440	06S64995F53	1K ohm
	R442	06S70072F67	3.9K ohm 1/4W
○	R443	06S70072F68	4.3K ohm 1/4W
●	R443	06S70072F67	3.9K ohm 1/4W
○	R444	06S70072F72	6.2K ohm 1/4W
●	R444	06S70072F74	7.5K ohm 1/4W
	R445	06S70072F16	30 ohm 1/4W
	R446	06S70072F17	33 ohm 1/4W
	R447	06S70072F41	330 ohm 1/4W
	R448	06S70072F42	360 ohm 1/4W
	R449	06S64995F53	1K ohm
	R450	06S64995F53	1K ohm

GR Control P.C.Board

IC's

	IC3101	51T64606F02	TA7705F
	IC3102	51T75010W01	BA3703F
	IC3501	51T75628W01	BA6285FP

Transistors

	Q3501	48T84366F05	2SB1243
	Q3502	48T62967F06	CP., DTC114YK
	Q3503	48T62967F06	CP., DTC114YK
	Q3504	48T83835F03	2SD1859

Diodes

	D3101	48T81063F01	CP., MA159
	D3501	48T81063F01	CP., MA159
	D3502	48T81063F01	CP., MA159
	ZD3501	48T83128F11	Zener, HZS7A2L

Symbol No.	Part No.	Description
	E3101	23S75372W02	ELY., 100μF / 10V
	E3102	23S75372W04	ELY., 10μF / 16V
	E3103	23S75372W02	ELY., 100μF / 10V
	E3104	23S75372W07	ELY., 47μF / 16V
	C3105	08S72783F31	CP., 470pF
	E3105	23S75372W09	ELY., 4.7μF / 35V
	C3106	08S72783F31	CP., 470pF
	E3106	23S75372W09	ELY., 4.7μF / 35V
	C3107	08S72783F31	CP., 470pF
	E3107	23S75372W15	ELY., 1μF / 50V
	C3108	08S72783F31	CP., 470pF
	E3108	23S75372W04	ELY., 10μF / 16V
	C3109	08S53332F48	CP., 0.012μF
	C3110	08S53332F48	CP., 0.012μF
	C3111	08S65128F35	CP., 100pF
	C3112	08S35374W01	CP., 0.1μF
	C3113	08S82122F59	CP., 820pF
	E3501	23S75372W18	ELY., 100μF / 25V
	C3502	08S65128F76	CP., 0.1μF
	C3503	08S65128F76	CP., 0.1μF

Resistors

(All resistors are chip 1/10W±5% unless otherwise noted.)

	R3101	06S53330F32	130 Ω 1/8W
	R3102	06S64996F15	360K Ω
	R3103	06S64995F81	15K Ω
	R3104	06S53330F81	15K Ω 1/8W
	R3105	06S53330F32	130 Ω 1/8W
	R3106	06S64995F81	15K Ω
	R3107	06S64995F81	15K Ω
	R3108	06S64996F15	360K Ω
	R3109	06S53330F29	100 Ω 1/8W
	R3110	06S53330F65	3.3K Ω 1/8W
	R3111	06S53330F65	3.3K Ω 1/8W
	R3112	06S53330F85	22K Ω 1/8W
	R3113	06S53330F85	22K Ω 1/8W
	R3116	06S64995F85	22K Ω
	R3117	06S64996F01	91K Ω
	R3118	06S64995F95	56K Ω
	R3119	06S64995F35	180 Ω
	R3507	06S70072F41	330 Ω 1/4W
	R3508	06S70072F41	330 Ω 1/4W
	R3509	06S64995F77	10K Ω
	R3510	06S70072F60	2K Ω 1/4W
	R3511	06S70072F60	2K Ω 1/4W
	R3512	06S53331F01	91K Ω 1/8W
	R3513	06S53331F01	91K Ω 1/8W

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

Symbol No.	Part No.	Description
	R3514	06S70072F53	1K Ω 1/4W
	R3515	06S81094F09	M.F., 4.7 Ω 1/2W

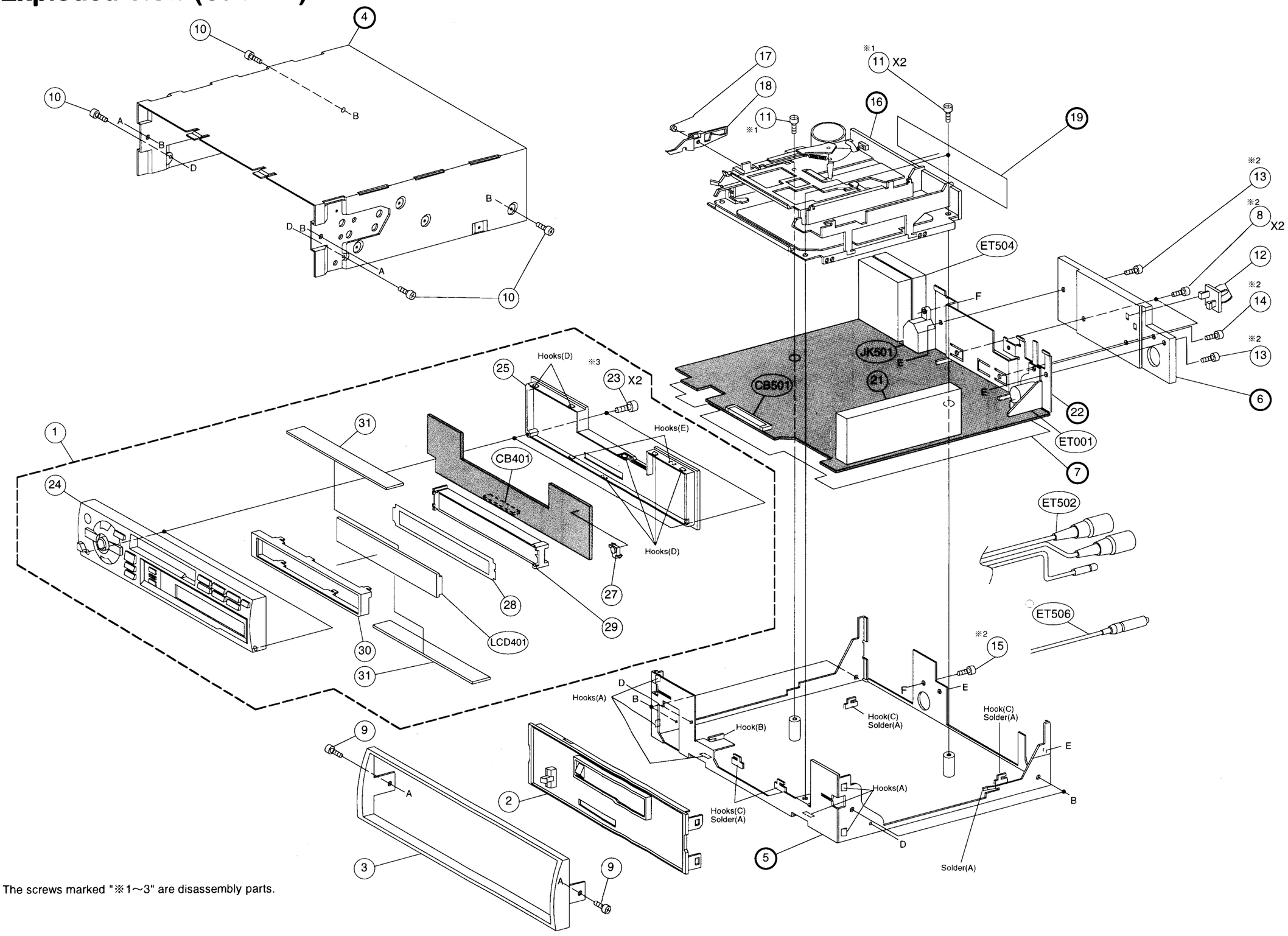
Miscellaneous

	CB401	09T85353W16	16P Connector
	CB501	09T85354W16	16P Connector
	ET001	09T55211W01	Antenna Receptacle
	ET502	01T55244W05	Assy., RCA Connector (Rear/N.F.P. Out (○), Rear Out (●) / Remote Turn-On)
○	ET506	01T75188W15	Remote Control Interface Connector
	ET504	01T75292W04	Assy., ISO Connector
	HD3101	88T95125W02	Assy., Head
	JK501	09T55493W02	DIN Connector (8P)
○	LCD401	65T95241W02	LCD Display
●	LCD401	65T85130W02	LCD Display
	M3501	01V94700W88	Assy., Main Motor (13.2V-95mA)
	M3502	01V91700W81	Assy., Sub Motor (7V-370mA)
	PT3501	51T63433F03	Sensor, Photo ON2170-R2
	PT3502	51T63433F03	Sensor, Photo ON2170-R2
	S3501	40T15222W01	Switch, Detector (PACK IN)
	S3502	40T15382W02	Switch, Detector SPPB32 (PAUSE)
	S3503	40T15382W02	Switch, Detector SPPB32 (MODE)
	S3504	40T15382W02	Switch, Detector SPPB32 (METAL)

Symbol No.	Part No.	Description

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

Exploded View (Cabinet)



NOTE: The screws marked "※1～3" are disassembly parts.

Cabinet Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol No.	Index	Part No.	Description
○	1	3-A	01V94100W79	Assy., Nose Unit
●	1	3-A	01V94400W98	Assy., Nose Unit
	2	5-D	13C70374W04	Assy., Front Escutcheon
	3	5-C	33C00544K01	Assy., Face Plate
	or		33C81778W01	Assy., Face Plate
	8	2-G	03S38013W02	Screw, Pan (M2.6X14)
	9		03S38013W13	Screw, Bind (M2.6X6)
	10		03S38013W24	Screw, Pan (M2.6X6)
	11		03S44205G29	Screw, Pan (M2.6X6)
	12	2-G	15A70387W01	Holder, Antenna
	13		03S44205G33	Screw, Pan (M2.6X8)
	14	2-G	03S44205G61	Screw, Pan (M2.6X10)
	15	4-F	03S68555F04	Screw, Pan (M2.6X6)
	17	1-E	41A20424W01	Spring, Door
	18	1-E	45C61079W01	Lever, Door
	21	3-F	77T95350W01	FM/MW/LW Tuner Unit, MX-R155AR (FE001)
	23	3-D	03S71677F56	Screw, Pan (M1.7X12)
○	24	3-A	13D90650W05	Assy., Nosepiece
●	24	3-A	13D90650W06	Assy., Nosepiece
	25	3-D	13D80516W01	Nose, Bottom
	27	4-D	15A80548W01	Cover, LED
	28	4-D	26A80485W01	Reflector, Sheet
	29	4-D	15C80753W01	Assy., Case LCD
	30	4-C	15B80486W01	Cover, LCD
	31		75T85248W01	Rubber, Electric

NOTE : ○: For TDM-7548R Model Only, ●: For TDM-7547R Model Only, Others : Common.

Disassembly Instructions

1. Removal of Nose Unit

(1) Refer to the Owner's Manual (Part No. 68P90579W51).

2. Removal of Front Escutcheon

(1) After removal of Face Plate and Top Cover, remove the Hooks (A). .....Hooks (A) (4-D, 5-F)

3. Removal of Cassette Deck

(1) After removal of Front Escutcheon, remove three screws No.11. .....Screws No. 11 (※1) (1-E, 1-F)
(2) Remove the Hook (B). .....Hook (B) (4-E)
(3) Disconnect the connector from Main P.C. Board.

4. Removal of Main P.C. Board

(1) After removal of Cassette Deck, remove six screws No. 8, 13, 14, 15 Screws No. 8, 13, 14, 15 (※2) (2-G, 3-G, 4-F) and remove the Heat Sink.
(2) Remove the Solder (A) and Hooks (C). .....Solder (A) (4-E, 5-E, 5-F)
Hooks (C) (4-E, 5-E, 5-F)
(3) Main P.C. Board with Bracket IC can be removed completely.

5. Removal of Front P.C. Board

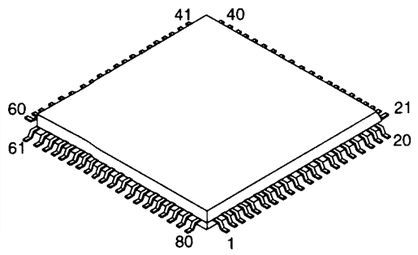
(1) After removal of Nose Unit, remove two screws No. 23. .....Screws No. 23 (※3) (3-D)
(2) Remove the Hooks (D), and remove the Nosepiece. .....Hooks (D) (3-D, 4-D)
(3) Remove the Hooks (E). .....Hooks (E) (3-D)

NOTE: For the screws No., Hooks, and Solder, refer to the Exploded View (Cabinet).

Semi-Conductor Lead Identifications

NOTE : For the parts not mentioned, refer to the Schematic Diagram.

75099W56 : IC502



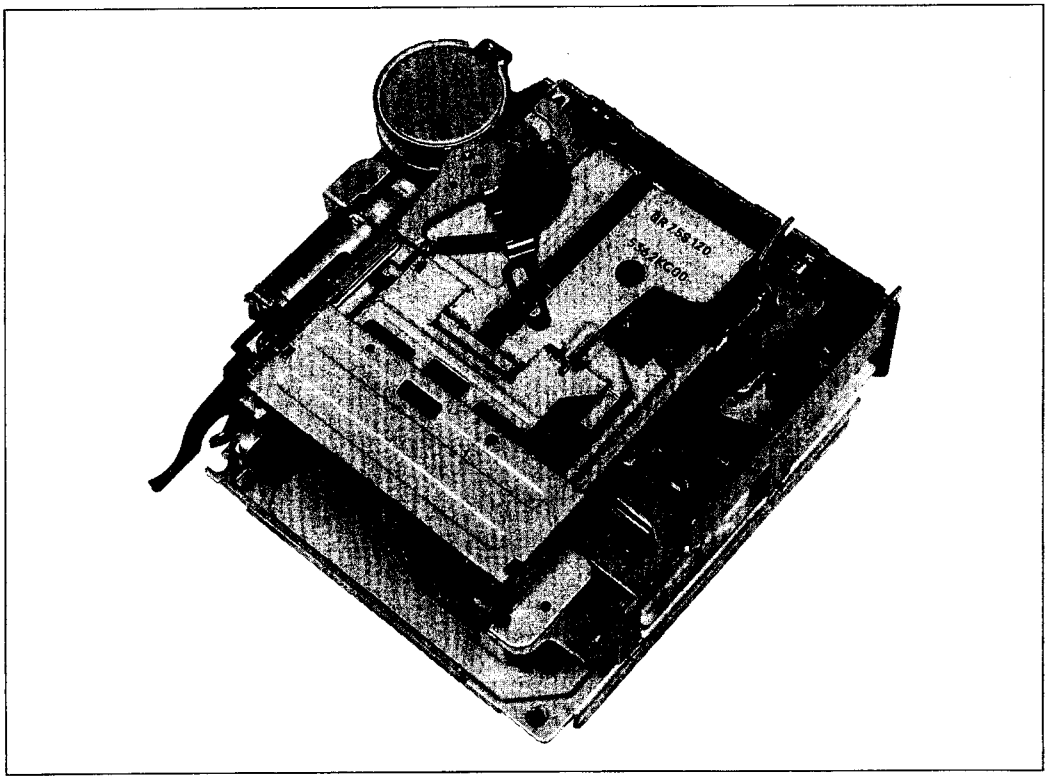
PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O
1	KEY A/D 3	I	21	POWER CONT	O	40	PACK IN SW	I	61	REMOCON	I
2	KEY A/D 2	I	22	A-MUTE	O	41	FOR/$\overline{REV}$	O	62	ACC DET	I
3	KEY A/D 1	I	23	IF MUTE	O	42	METAL	I	63	BAT DET	I
4	GND	—	24	NFP 1	O	43	L. O. FAST	O	64	RDS CLOCK	I
5	NC	—	25	NFP 2	O	44	M. S. DET	I	65	CHG BUS IN	I
6	NC	—	26	$\overline{DOLBY\ B}$	O	45	LOC/$\overline{DX}$	O	66	CHG BUS OUT	O
7	V_{DD}	—	27	PAUSE SW	I	46	LW	O	67	PLL DOWN	—
8	MONI RXD	I	28	FOR RUN DET	I	47	50K REF	O	68	V_{DD}	—
9	MONI TXD	O	29	MODE SW	I	48	NC	—	69	X2	O
10	RDS SYNC	O	30	REV RUN DET	I	49	SD	I	70	X1	I
11	$\overline{LCD\ INH}$	O	31	NC	—	50	ALARM	O	71	GND	—
12	LCD DATA	O	32	F-IN	O	51	$\overline{IF\ REQ}$	O	72	NC	—
13	LCD CLK	O	33	GND	—	52	$\overline{ST\ IND}$	I	73	GND	—
14	LCD CE	O	34	R-IN	O	53	NC	—	74	AV_{DD}	—
15	LED IND	O	35	O-MOTOR	O	54	FM/$\overline{AM}$	O	75	AV_{REF}	—
16	NC	—	36	○ SCL	O	55	PLL DO	I	76	S-METER	I
17	NC	—		● NC	—	56	PLL CLK	O	77	MULTI PATH	I
18	NC	—	37	○ SDA	I/O	57	PLL DI	O	78	SELECT	I
19	○ NOSE POWER	O		● NC	—	58	PLL CE	O	79	GND	—
	● NC	—	38	EV-CLK	O	59	RDS DATA	I	80	NOSE ON	I
20	NC	—	39	EV-DATA	O	60	$\overline{RESET}$	I			

ALPINE®

SERVICE MANUAL

ALPI-00441

Cassette Deck Mechanism



GR-S SERIES

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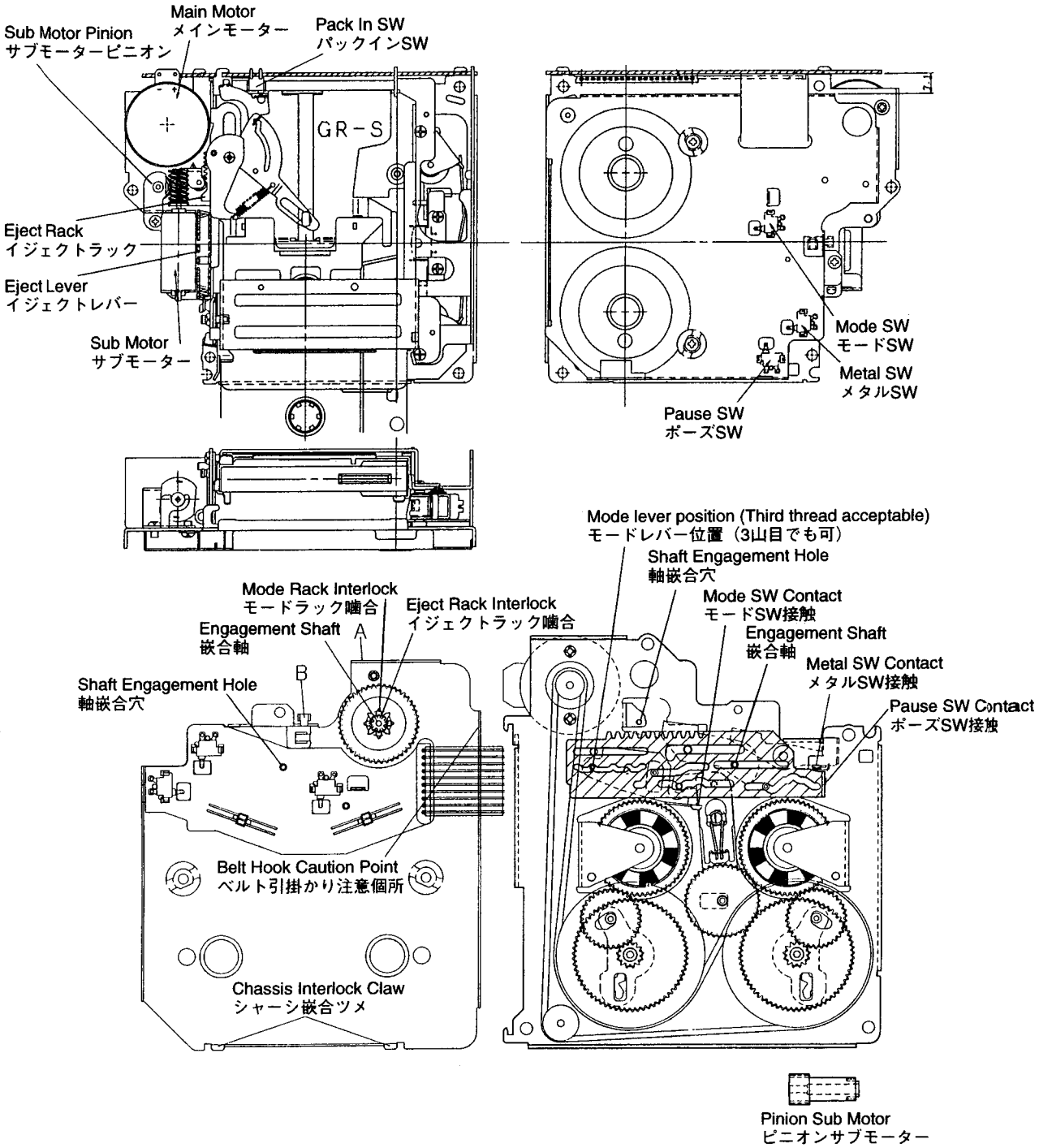
Basic Operation of GR-S Mechanism
GR-Sメカ基本動作



Mode rack engagement should be made so that normal engagement is obtained when an end of section A touches the chassis closely with the pinion sub motor inserted in place and rotated after temporary installation of the bottom cover. In this case, the sub motor wires should be positioned in the normal guide of the section B (should not be jammed). The metal lever should be installed by moving the switch contact section to inside of the mechanism as in GR-H.

モードラックの噛合せはボトムカバー仮装着後PINION SUB MOTORを正規位置に挿入して回転させる。
A部端面がシャーシと密着出来たとき正常な噛合い状態になったことを意味する。
又このときサブモータワイヤがB部の正規ガイド位置にあること。（挟み込みさせないこと。）
メタルレバーはGR-Hと同様にSW接触部をメカ内部に移動させて組み込むこと。

A. Loading
1. Insert a cassette pack.
2. PACK IN SW goes ON→OFF.
3. SUB motor rotates and the power is transferred to SUB MOTOR PINION, EJECT rack, and EJECT lever, and moves to the direction shown by the arrow.
4. After completion of the cassette pack loading, motion start of the mode lever is detected by checking ON→OFF of the PAUSE SW, and rotation of the SUB MOTOR stops once, and then the SUB MOTOR rotates in reverse direction until the PAUSE SW is ON again. After the stop of the SUB MOTOR, the main motor rotates.
5. When the main motor rotates, both reels rotate in the winding direction and eliminate slack of the tape at the PAUSE position. (Loading completion)

A. ローディング
1. カセットパックを挿入する。
2. PACK IN SWがON→OFFになる。
3. SUBモーターが回転してSUB MOTOR PINION、EJECTラック、EJECTレバーと動力が伝達し、矢印方向へ移動する。
4. カセットパック装着完了後、モードレバーが動き始めたことを、PAUSE SWがON→OFFすることで、検知しSUB MOTORの回転を一旦停止させ、再度PAUSE SWがONするまで逆回転させる、SUB MOTOR停止後メインモーターを回転させる。
5. メインモーターの回転により、両リールを巻き取り方向に回転させ、テープのタルミをPAUSE位置でなくする。（ローディング完了）

B. Play
1. Rotation of the main motor stops and the SUB MOTOR rotates, thereby moving the mode lever to the PLAY position.
2. Motion of the mode lever to the PLAY position is detected by checking ON/OFF number of the mode SW and rotating direction of the sub motor.
3. After detection of the mode lever moved to the PLAY position, the SUB MOTOR rotation stops and the main motor rotates, thus entering the PLAY operation.

B. プレイ
1. メインモーターの回転を停止させ、SUB MOTORを回転させて、モードレバーをPLAY位置に移動させる。
2. モードレバーのプレイ位置への移動はモードSWのON/OFF回数とサブモーターの回転方向で検知する。
3. モードレバーがPLAY位置に移動したことを検知したら、SUB MOTORの回転を停止し、メインモーターを回転させてPLAY動作に入る。

C. PROG
1. With the PROG KEY SW ON, the SUB MOTOR rotates, and the mode lever moves to next PLAY position (NORMAL→REVERSE PLAY or REVERSE→NORMAL PLAY).
2. When the mode switch detects the next PLAY position, the SUB MOTOR rotation stops, and operation shifts to the PLAY.

C. PROG
1. PROG KEY SW ONにより、SUB MOTORを回転させ、モードレバーを次のPLAY位置（NORMAL→REVERSE PLAY又は、REVERSE→NORMAL PLAY）に移動させる。
2. モードSWが次のPLAY位置を検知したらSUB MOTORの回転を停止し、PLAYに移行する。

D. FF/REW (QUE/REVIEW)

1. With KEY ON, rotation of the main motor stops and the SUB MOTOR rotates to bring the mode lever to the specified position.
2. When the specified position is detected by counting ON/OFF number of the mode SW, the SUB MOTOR rotation stops, and the main motor rotates to perform tape fast winding operation.
   (According to the stop position of the mode lever, all of head position retreat, playback engagement releasing, pinch roller retreat, and FF gear engagement are kept.)

D. FF/REW (QUE/REVIEW)

1. KEY ONによりメインモーターの回転を停止し、SUB MOTORを回転させモードレバーを所定の位置に移動させる。
2. モードSWのON/OFF回数をカウントし、所定の位置を検知したらSUB MOTORの回転を停止し、メインモーターを回転させ、TAPE早送り動作を行う。
   （モードレバーの停止位置により、ヘッド位置後退、プレイ噛み合い切り離し、ピンチローラー後退、早送り歯車の噛み合いは、全て維持される。）

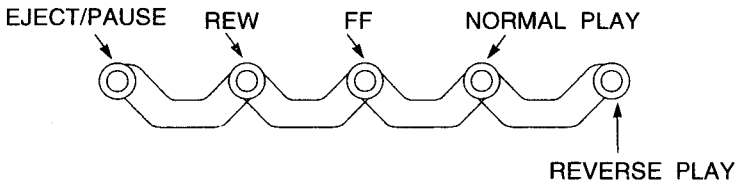
E. EJECT

1. With KEY ON, main motor rotation stops and SUB MOTOR rotates, thereby moving the mode lever to the EJECT/PAUSE position.
2. When the PAUSE SW turns on with the mode lever moved , the SUB MOTOR rotation stops, the main motor rotates to perform take up operations for both the reels.
3. When beginning of the reel slip is detected with tape slack eliminated, the main motor rotation stops and the sub motor rotates to move the EJECT lever in the eject direction.
4. When the PACK IN SW goes from OFF to ON, the SUB MOTOR rotation stops and the EJECT operation completes.

E. EJECT

1. KEY ONにより、メインモーターの回転を停止すると共に、SUB MOTORを回転させ、モードレバーをEJECT/PAUSE位置に移動させる。
2. モードレバーの移動は、PAUSE SWがONした所でSUB MOTORの回転を停止しメインモーターを回転させ両リールの巻き取り動作を行う。
3. テープタルミが無くなり、リールスリップが始まったことを、検知したらメインモーターの回転を停止し、SUB MOTORを回転させてEJECTレバーを排出方向に移動させる。
4. PACK IN SWがOFF→ONに切り換わったらSUB MOTORの回転を停止させEJECT完了となる。

Mode lever position
モードレバー位置



Mechanism operations are determined by positions of the mode lever shown above.
メカの動作は上記モードレバーの位置で決まる。

Operations of MODE SW and PAUSE SW

MODE SW、 PAUSE SWの動作

REV. PLAY

Mechanism operation shift メカ動作の移行		MODE SW	PAUSE SW
Loading	→Play	4	2
	FF		
	REW		
Play	→FF	3	0
	REW	2	0
	PROG	1	0
	EJECT	4	1 (OFF→ON)
FF	→Play	3	0
	REW	1	0
	PROG		
	EJECT	1	1 (OFF→ON)
REW	→Play	2	0
	FF	1	0
	PROG		
	EJECT	2	1 (OFF→ON)

ON→OFF number of above switches
上記SWのON→OFF回数

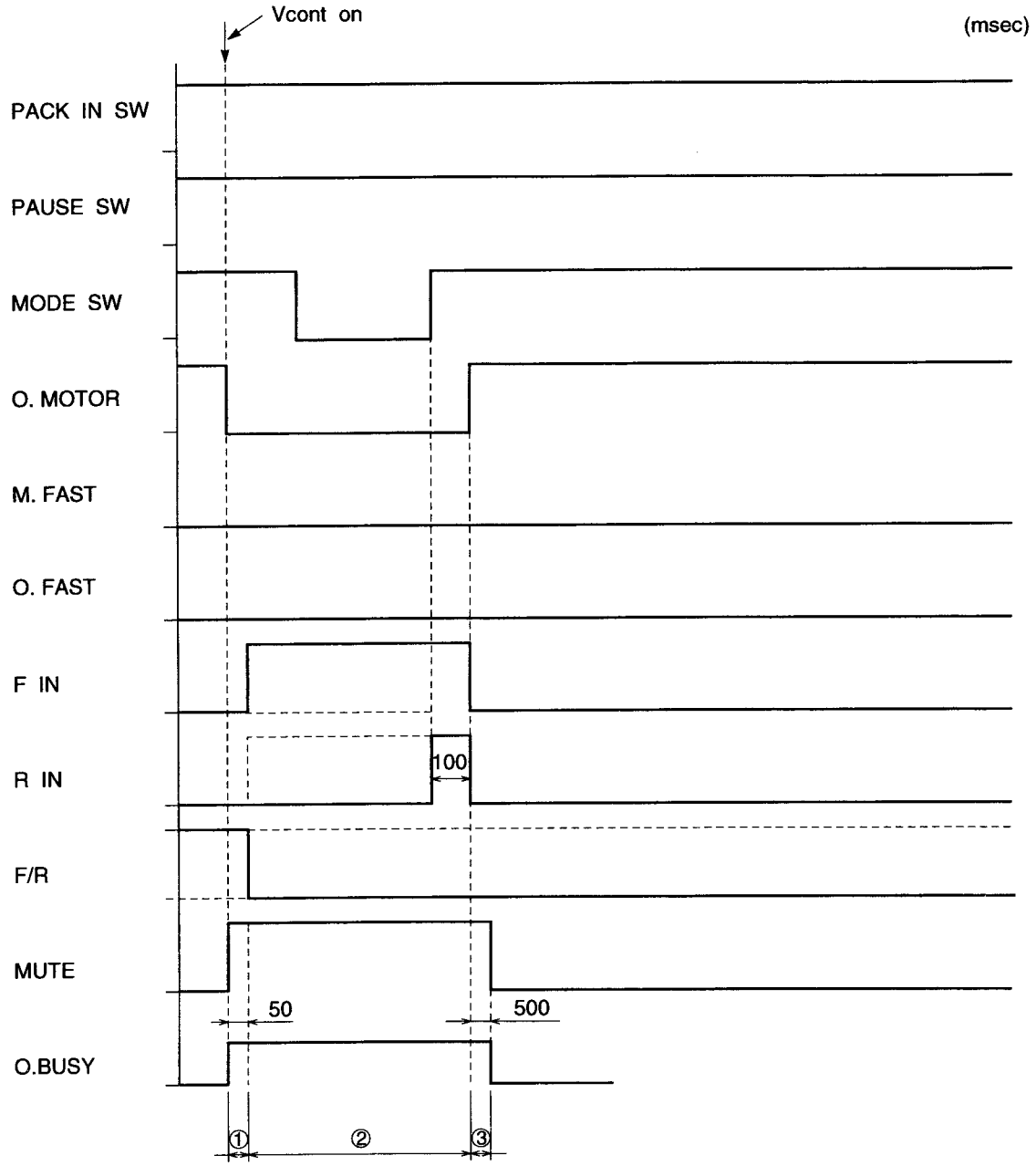
FOR. PLAY

Mechanism operation shift メカ動作の移行		MODE SW	PAUSE SW
Loading	→Play	3	2
	FF		
	REW		
Play	→FF	1	0
	REW	2	0
	PROG	1	0
	EJECT	3	1 (OFF→ON)
FF	→Play	1	0
	REW	1	0
	PROG		
	EJECT	2	1 (OFF→ON)
REW	→Play	2	0
	FF	1	0
	PROG		
	EJECT	1	1 (OFF→ON)

ON→OFF number of above switches
上記SWのON→OFF回数

Mechanism basic operation timing chart
メカニズム基本動作タイミングチャート

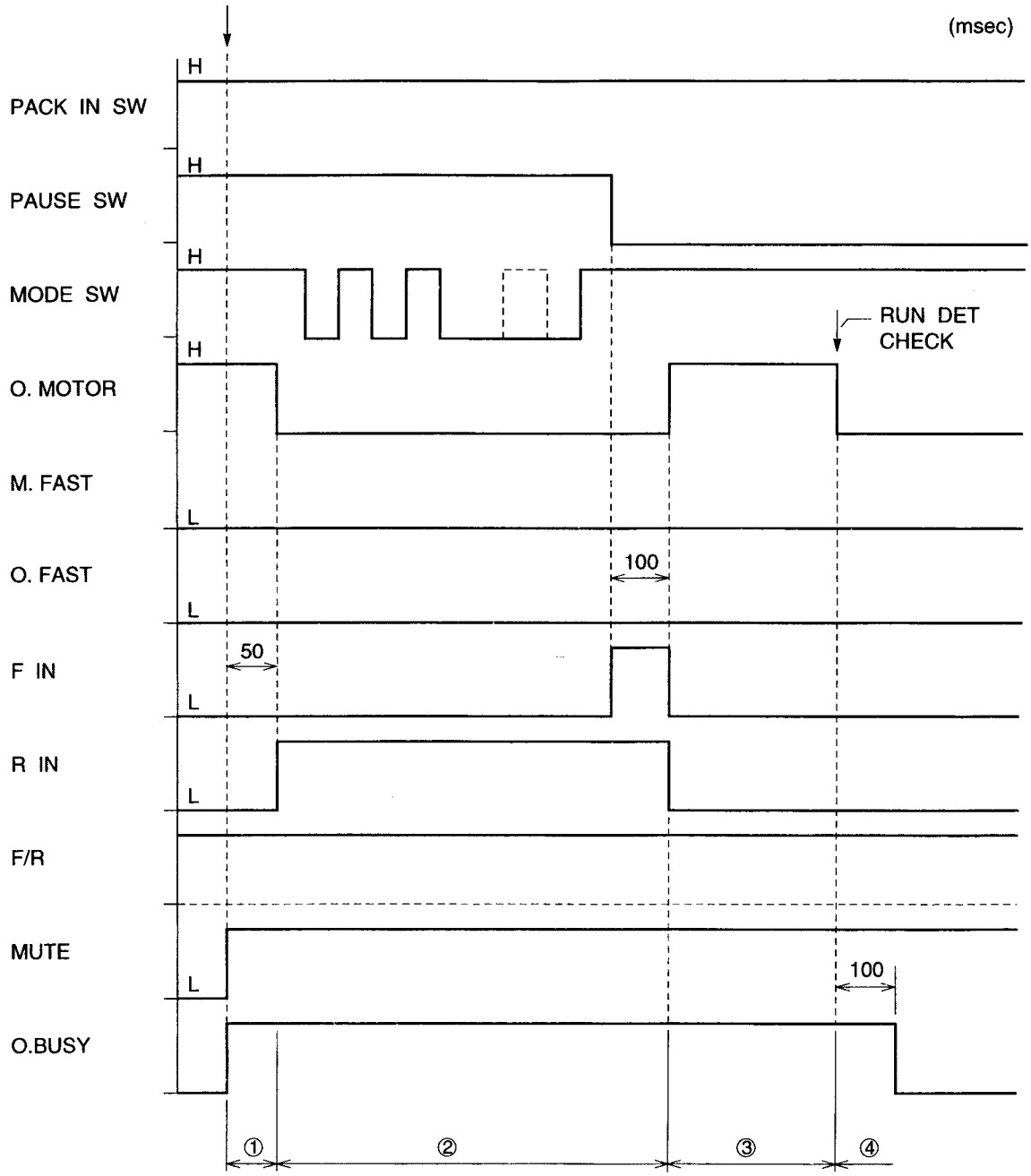
Shift MODE　　PLAY → PLAY (PROG)
移行モード　　PLAY → PLAY (PROG)



① Tape wind stop: Main motor stops.
② Mode lever shift: SUB MOTOR rotates, mode lever moves to a specified position and stops.
③ Mode determination: Muting until operation reaches a stable status.

① TAPE巻取り停止：MAIN MOTORを停止させる。
② MODE LEVER移動：SUB MOTORを回しMODE LEVERを目的の位置まで移動させ停止させる。
③ MODE確定：動作安定までMUTE。

Shift MODE　　PLAY → PAUSE
移行モード　　PLAY → PAUSE

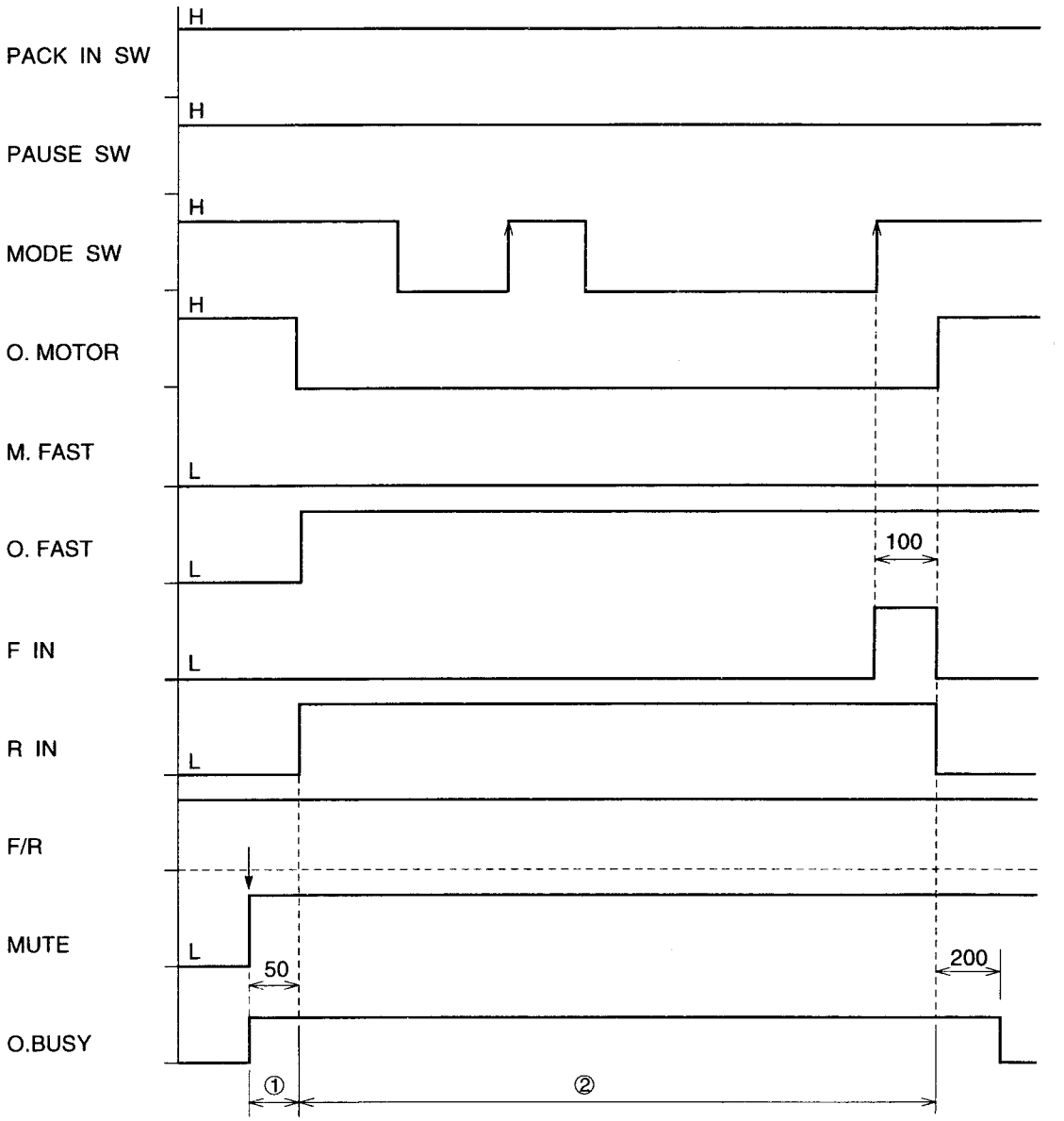


① Tape wind stop: Main motor stops.
② Mode lever shift: Sub motor rotates, mode lever moves to a specified position and stops.
③ Removal of tape slack: Both reel rotate in winding direction and eliminate tape slack.
④ Reel stop: Main motor stops when run det pulse reaches a specified value.

① TAPE巻取り停止：MAIN MOTOR停止
② MODE LEVER移動：SUB MOTORを回し、MODE LEVERを目的の位置まで移動させ停止させる。
③ TAPE弛み取り：両リールを巻取方向へ回転させ、TAPEの弛みを無くす。
④ リール停止：RUNDET PULSが設定値に達したらMAIN MOTORを停止させる。

Shift MODE　　PLAY → REW
移行モード　　PLAY → REW

(msec)

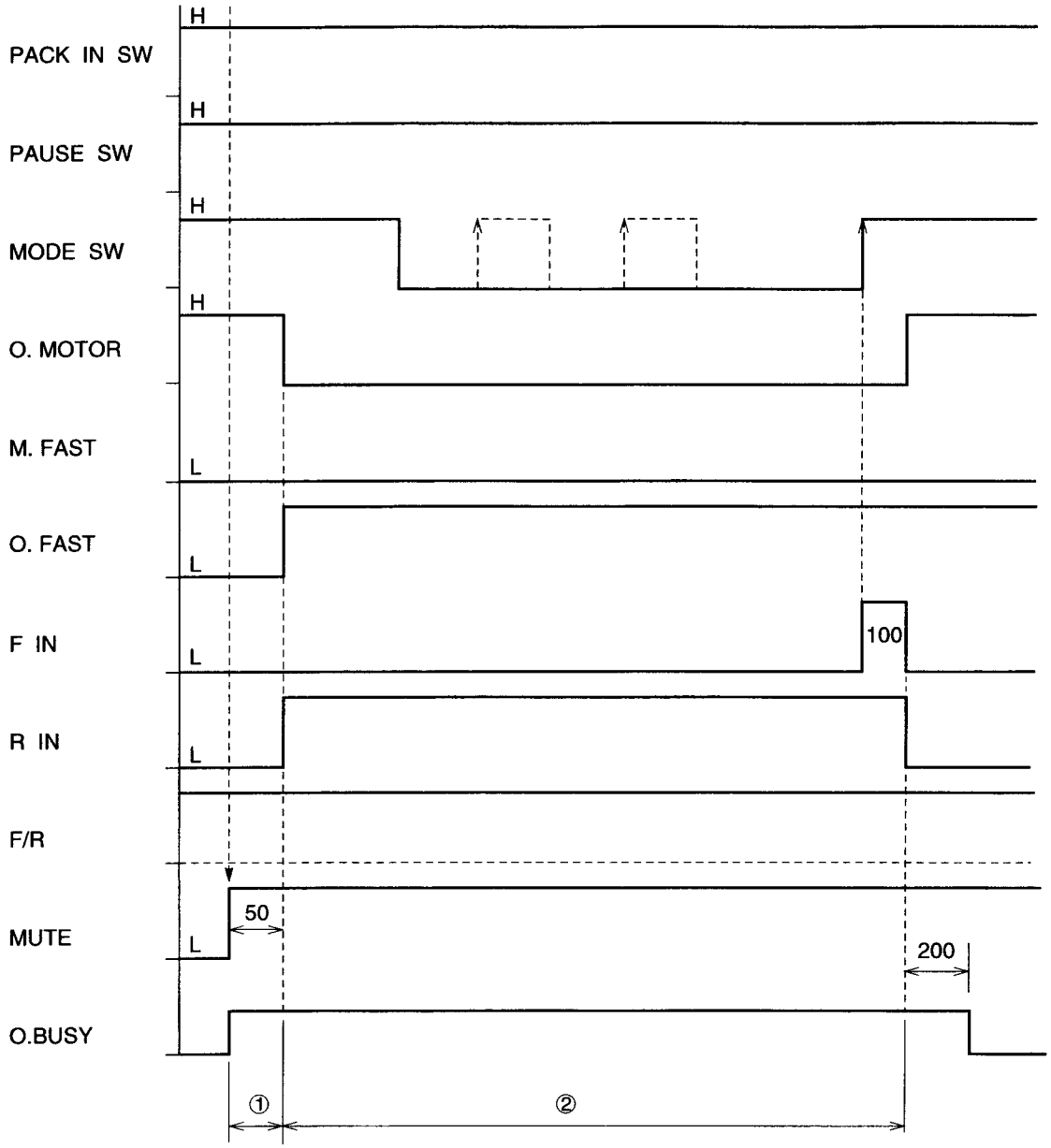


① Tape wind stop: Main motor stops.
② Mode lever shift: Sub motor rotates and mode lever moves to a specified position and stops.

① TAPE巻取り停止：MAIN MOTOR停止
② MODE LEVER移動：SUB MOTORを回しMODE LEVERを目的の位置まで移動させ停止させる。

Shift MODE　　PLAY → FF
移行モード　　PLAY → FF

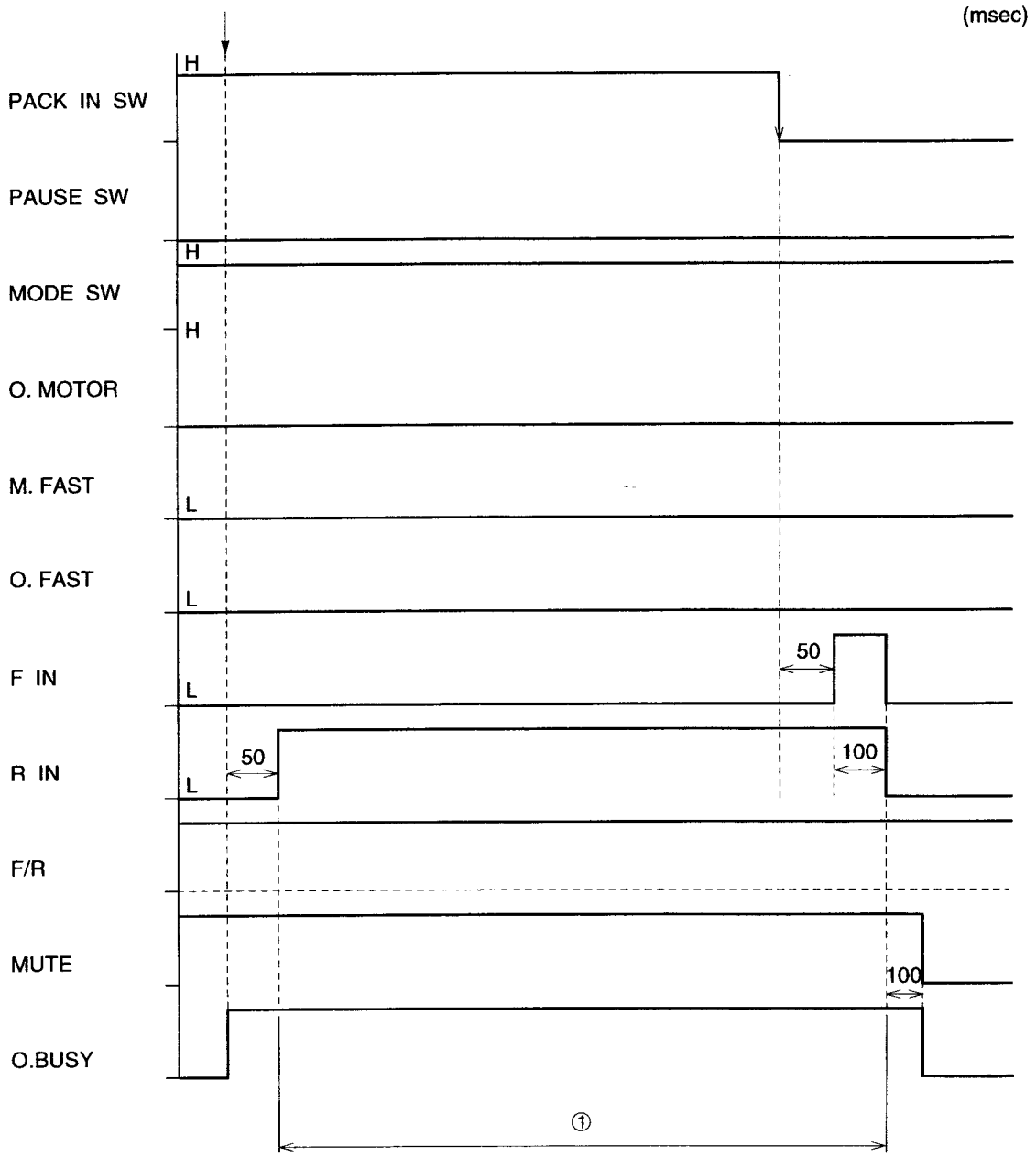
(msec)



① Tape wind stop: Main motor stops.
② Mode lever shift: Sub motor rotates and mode lever moves to a specified position and stops.

① TAPE巻取り停止：MAIN MOTOR停止
② MODE LEVER移動：SUB MOTORを回しMODE LEVERを目的の位置まで移動させ停止させる。

Shift MODE　　PAUSE → EJECT
移行モード　　PAUSE → EJECT



① Cassette pack eject: Rotates sub motor and lifts up the cassette holder.
Rotates the sub motor further to move slider forward and ejects the pack.

① カセットパック排出：SUB MOTORを回しCASSETTE HOLDERをリフトさせる。
さらにSUB MOTORを回しスライダーを手前に移動させPACKを排出させる。

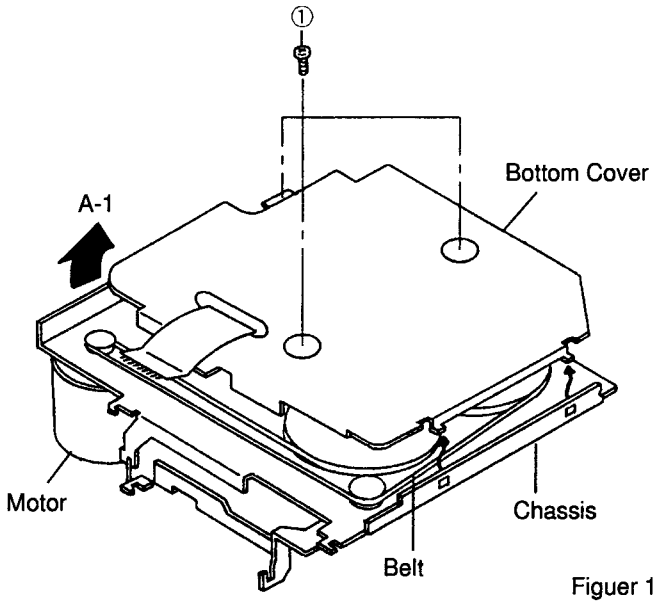
Disassembly, Assembly and Replacement of Functional Parts
機能部品の分解・組立及び交換方法

1. Disassembly and Assembly of Bottom Cover

(1) Turn the mechanism around as shown in Figure 1.
(2) Remove three screws ① as shown in Figure 1.
(3) Lift the bottom cover slowly from the position A-1, pull the hooks out of the holes in the chassis, and remove the bottom cover as shown in Figure 1.
(4) Set the mechanism to pack down status and place the mode lever to the position shown in Figure 2-1.
(5) Press the metal switch lever in direction shown by the arrow (refer to Figure 2-2), insert the pinion sub motor shaft to the pinion sub motor hook hole, and insert the chassis engagement claws into the chassis engagement holes. (Check to see the sub motor wire is placed in the normal guide position of B section.)
(6) Rotate the pinion sub motor counterclockwise after insertion of the bottom cover, and check to see the end place of A section in Figure 2 is closely touched. (refer to Figure 3)
(7) Fix the screws that have been removed.
NOTE : ① When fixing the bottom cover, be careful to avoid damage by the belt.
② Fasten the three screws with a fastening torque of 6 kg.cm.

1. ボトムカバーの分解方法及び組立方法

(1) メカを裏返しにします。(図1参照)
(2) 3本のネジ①を外します。(図1参照)
(3) A-1部からボトムカバーをゆっくりと浮かし、切り起こしの嵌合部を外し、分解します。(図1参照)
(4) 組立時は、メカをパックDOWN状態にして、モードレバーの位置を図2-1の位置に合わせます。
(5) メタルSWレバーを矢印方向(図2-2参照)に押し、SUB MOTOR嵌合軸をSUB MOTOR軸嵌合穴に挿入し、シャーシー嵌合ツメをシャーシー嵌合穴に挿入します。←ボトムカバー仮装着完了。
(この時、サブモーターワイヤーがB部正規ガイド位置にあること)
(6) ボトムカバー仮装着後SUB MOTORを左回りに回し、図2A部端面がシャーシと密着したことを確認します。(図3参照)
(7) 分解時に外したネジを止めます。
[注意] ① 組立時、ベルトに傷を付けない様に注意して下さい。
② 3本のネジは6kgcmのトルクで締め付けて下さい。



Figuer 1

Figure 2-1

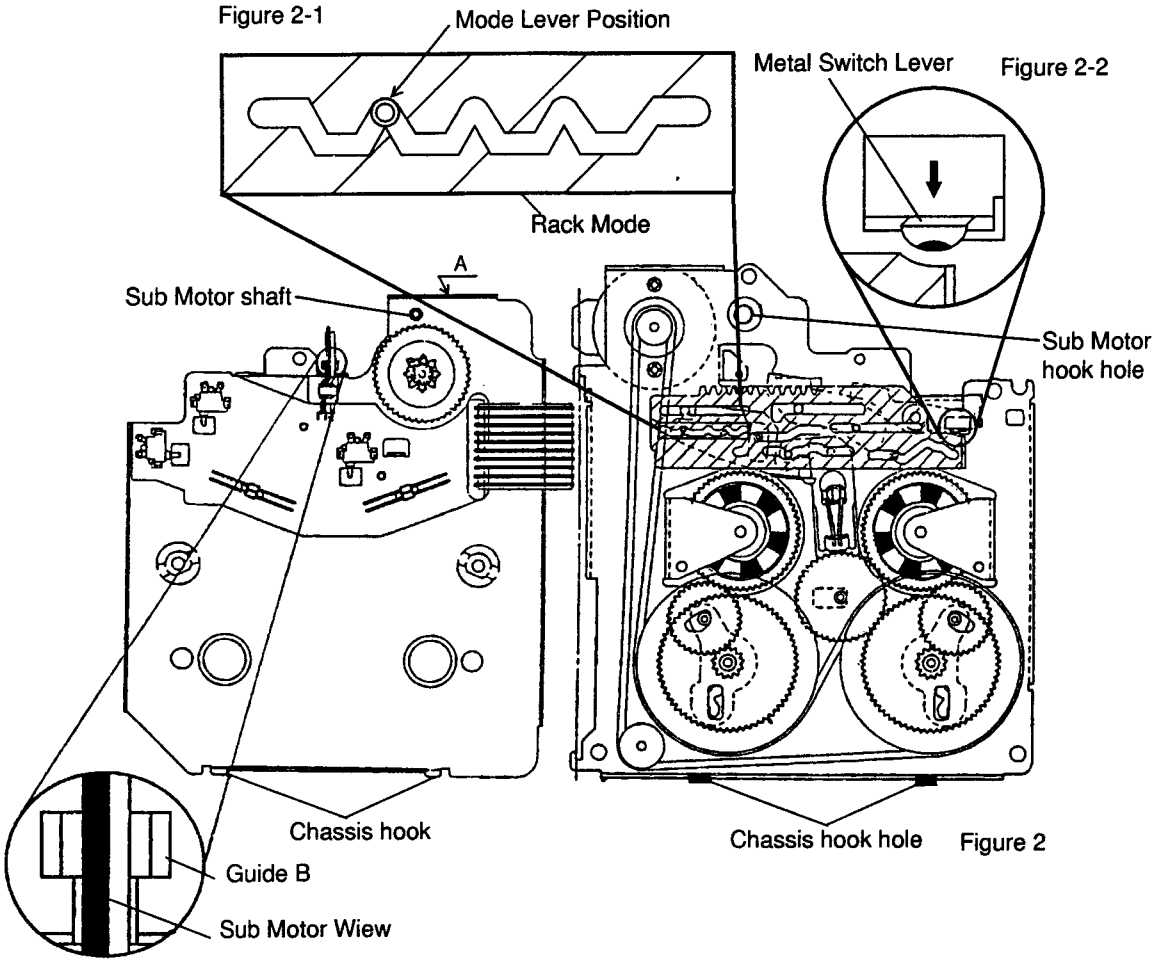


Figure 2-2

Figure 2

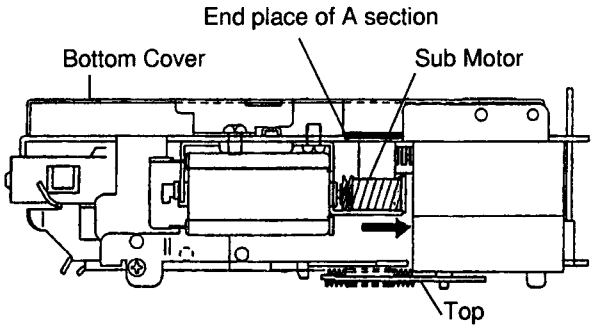


Figure 3

2. Replacement of the bottom cover mounting parts

2. ボトムカバーの取付部品の交換方法

a. Replacement of the inner gear/planet gear/sun gear

(1) Remove M1.2 lock washer ② as shown in Figure 4.

(2) Pull the eject pinion out of the inner gear and remove the inner gear, eject base pinion and sun gear as shown in Figure 4.

(3) Turn the eject base pinion, remove the three planet gear as shown in Figure 4.

(4) Apply the grease (PG-671) to the section B-1, and mount the inner gear/planet gear/sun gear following the removal steps in the reverse order. After replacement is smoothly. (Refer to Figure 6.)

NOTE : ① Do not reuse the used lock washer for remounting.
② Take care to avoid damage by piercing and tearing.
③ Do not forget insertion of planet gears. Check number of the gears also.

a. インナーギア／プラネットギア／サンギアの交換方法

(1) ロックワッシャー②（M1.2）を外します。(図4参照)

(2) イジェクトピニオンをインナーギアより引き抜き、インナーギア／イジェクトベースピニオン／サンギアの順に外します。(図4参照)

(3) イジェクトベースピニオンを裏返しにしてプラネットギア（3個）を外します。(図4参照)

(4) B-1部分にグリス（PG-671）を塗布し、取り外しの逆の手順で組み立てて下さい。尚交換後、ギアの回転がスムーズであるか確認して下さい。(図6参照)

[注意] ① 一度使用したロックワッシャーは組立時には使用しないで下さい。
② 口開き、めくれのない様に注意して下さい。
③ プラネットギアの挿入忘れ、不足のないこと。

b. Replacement of the photo sensor

(1) Remove eight solders 21 as shown in Figure 5.

(2) Remove the photo sensor from the photo P.C.Board as shown in Figure 5.

(3) Solder the legs so that the photo sensor is set as indicated by [ ] in Figure 5.

NOTE : ① When using the soldering iron, set the temperature of the soldering iron to 270° ±20℃and the soldering time to less than 3 seconds.
② Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damage.

b. フォトセンサーの交換方法

(1) 8ケ所の半田21を外し、フォトセンサーをフォト基板より外します。(図5参照)

(2) 良品のフォトセンサーを図中の[ ]と同じ方向になる様に半田付けします。(図5参照)

[注意] ① 半田ゴテを使用する際、半田ゴテ先温度270° ±20℃、半田付け時間3秒以下とする。
② ルーズ半田、ショート等のないこと。又、皮膜破れに注意すること。

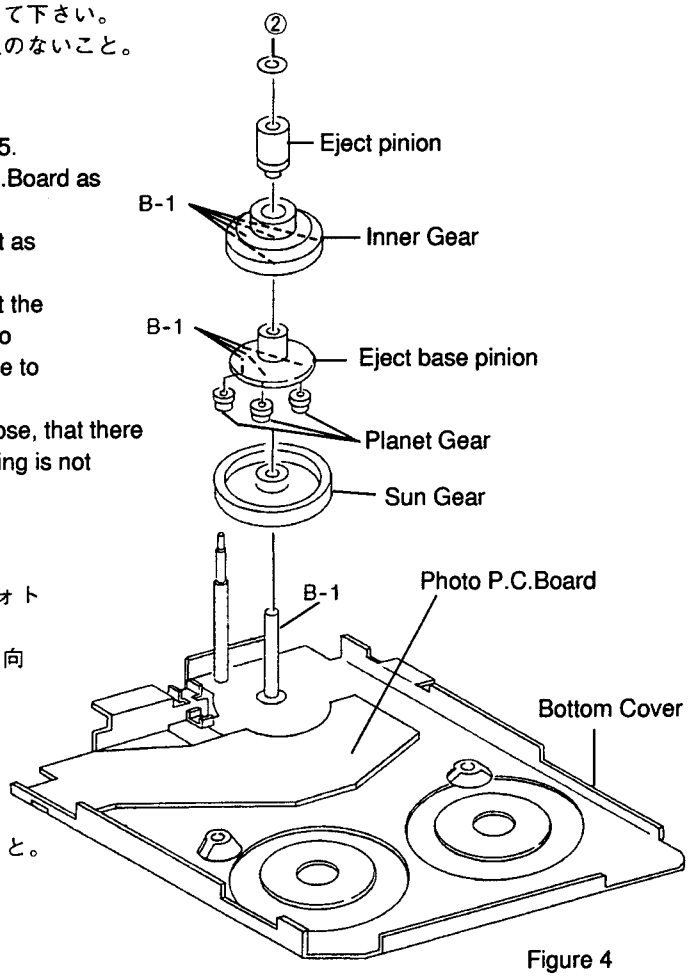


Figure 4

c. Replacement of the detector switch (Pause/Metal/Mode)

(1) Remove six solders 22 with which the switch is fixed as shown in Figure 5.

(2) Prepare the terminals of the switch of the new one as shown in Figure 6.

(3) After that, insert the switch into the photo P.C.Board, and solder the terminals.

NOTE : ① When using the soldering iron, refer to item 2-b to make sure that the temperature of the soldering iron and the soldering time are proper.

② Take care that the switch guide is properly fixed and straight.

c. 検出スイッチ（ポーズ・メタル・モード）の交換方法

(1) スイッチを止めている6ケ所の半田22をそれぞれ外します。(図5参照)

(2) 良品のスイッチの端子を水平に直します。(図6参照)

(3) フォト基板に差し込み、端子を半田付けします。

[注意] ① 項目2-bと同様に半田ゴテのコテ先温度、半田付け時間に注意すること。

② スイッチの浮き及び傾きがない様にすること。

3. Replacement of the mounting parts on the rear of the main chassis

3. メインシャーシー裏側取付部品の交換方法

a. Replacement of the belt

(1) After removing the bottom cover, remove the belt.

(2) Clean the new belt with absolute alcohol, and fix it as shown in Figure 7.

NOTE : ① When fixing the belt, make sure that is not twisted or dirty.

② When removing the belt, do not turn up the front of chassis.

a. ベルトの交換方法

(1) ボトムカバーを外した後、ベルトを取り外します。

(2) 良品のベルトを無水アルコールでクリーニングしてから掛けます。(7図参照)

[注意] ① 取り付け時、ねじれ及び汚れがない様にすること。

② ベルトを取り外した時、シャーシーを表側にしないこと。

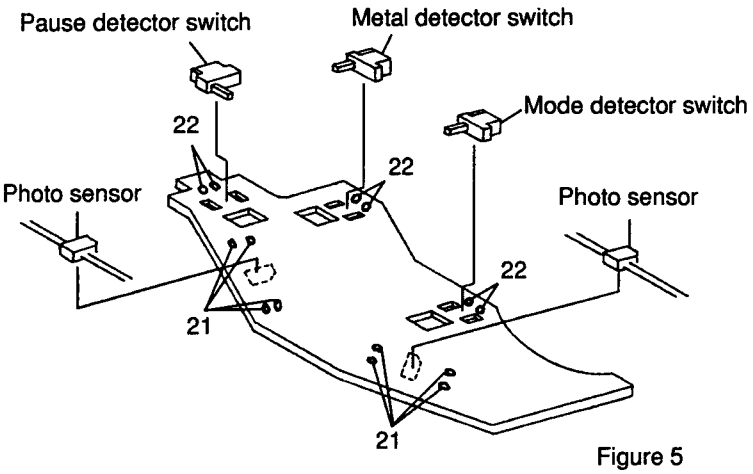


Figure 5

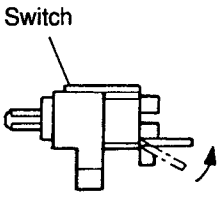


Figure 6

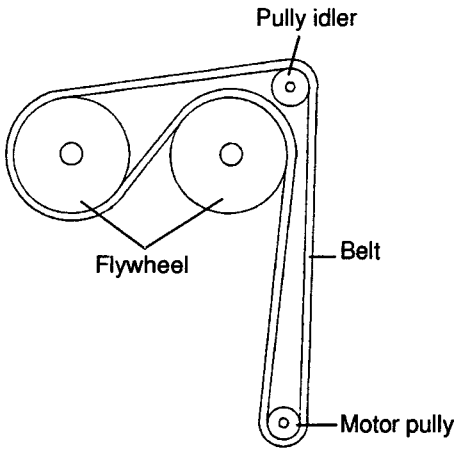


Figure 7

b. Replacement of the main motor

(1) After removing the belt, remove solder ⑫-1, and remove the wire flat (2P) from the control P.C.Board as shown in Figure 10.

(2) Remove two screws ⑦, and remove the main motor as shown in Figure 8.

(3) Mount the new motor following the removal steps in the reverse order.

NOTE : ① When using the soldering iron, set the temperature of the soldering iron to 320° ±20℃ and the soldering time to less than 3 seconds.

② Since the wire flat is very easily damaged, handle it with care.

③ Fasten the two screws with a fastening torque of 2kg.cm.

b. メインモーターの交換方法

(1) ベルトを外した後、半田⑫-1を外し、ワイヤーフラット（2P）をコントロール基板より外します。(図10参照)

(2) 2本のネジ⑦を外し、メインモーターを外します。(図8参照)

(3) 良品のメインモーターを取り外し方法の逆の手順で組み立てます。

[注意] ① 半田ゴテを使用する際、半田ゴテ先温度320° ±30℃、半田付け時間3秒以下とする。

② ワイヤーフラットは損傷し易いので取扱いには十分注意すること。

③ 2本のネジは2kgcmのトルクで締め付けること。

c. Replacement of the flywheel

(1) After removing the belt, pull out the two flywheels. Take care not to loose the polyslider washer ⑤ located between the flywheel and the chassis. (Refer to Figure 8)

(2) Fix the polyslider washer to the new flywheel and mount the flywheel to chassis.

c. フライホイールの交換方法

(1) ベルトを外した後、2個のフライホイールを引き抜きます。この時フライホイールとシャーシーの間にそれぞれ1個のポリスライダーワッシャー⑤がありますので紛失しない様に注意して下さい。(図8参照)

(2) 良品のフライホイールにポリスライダーワッシャーを取り付け、シャーシに取り付けます。

d. Replacement of the rack mode

(1) Remove M1.7 lock washer ③, and remove the rack mode as shown in Figure 8.

(2) Apply the molykote G paste to the section D-3, and mount the rack mode following the removal steps in the reverse order. (Refer to Figure 8)

NOTE : ① Check to see the rack mode can move left to right in its full stroke.

② Do not reuse the used lock washer for remounting.

③ Take care to avoid damage by piercing and tearing.

d. ラックモードの交換方法

(1) 2個のロックワッシャー③（M1.7）を外し、シャーシーより引き抜き、ラックモードを外します。(図8参照)

(2) 良品のラックモードのD-3部分にモリコートGペーストを塗布し、取り外しの逆の手順で取り付けます。

[注意] ① ラックモードは左右に全ストローク動作することを確認する。

② 一度使用したロックワッシャーは組立時には使用しないで下さい。

③ ロックワッシャー取り付け時、口開き、めくれのない様に注意すること。

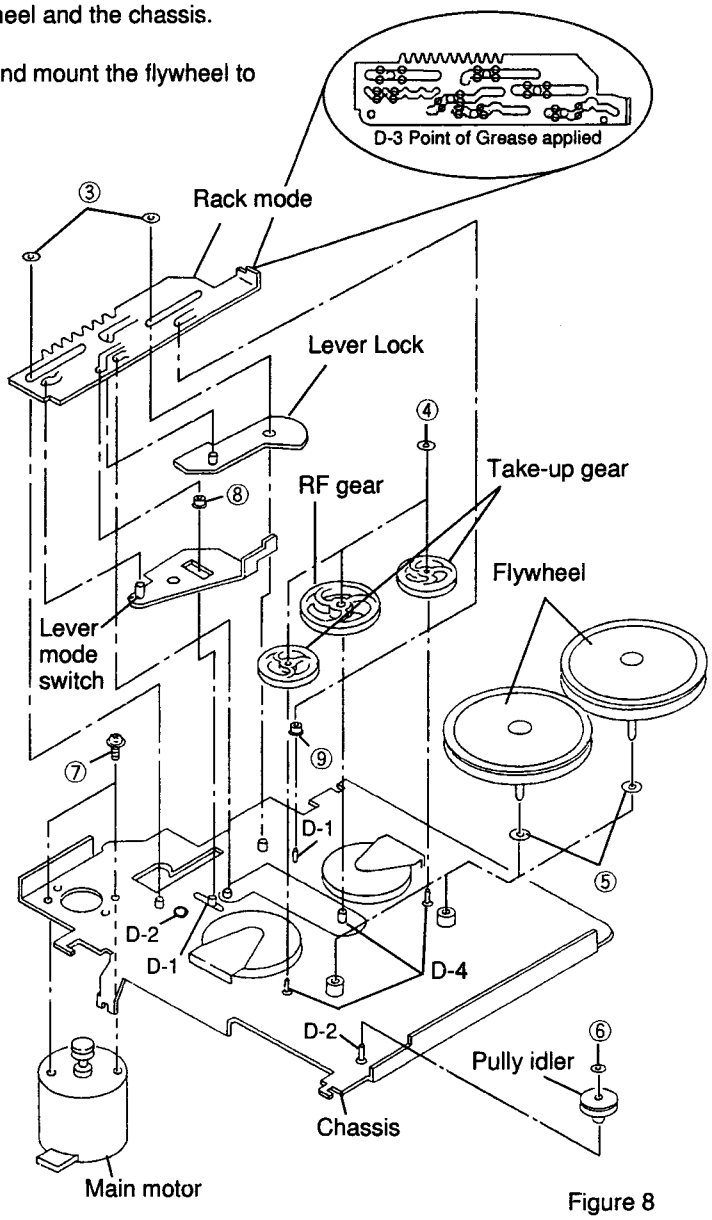


Figure 8

e. Replacement of the lever lock/lever mode switch/roller mode

(1) After removing the rack mode, remove the lever lock and lever mode switch. (Refer to Figure 8)

(2) Pull it up from the stud and remove the two roller mode ⑧, ⑨ as shown in Figure 8.

(3) Apply the molykote G paste to the section D-1, the grease (PG-671) to the section D-2 and mount the roller mode/lever mode switch/lever lock following the removal steps in the reverse order.

NOTE : ① Check to see the roller mode is inserted without fail.

e. レバーロック／レバーモードスイッチ／ローラーモードの交換方法

(1) ラックモードを外した後、レバーロック、レバーモードスイッチの順に引き抜きます。（図8参照）

(2) 2個のローラーモード⑧、⑨をスタットより引き抜きます。（図8参照）

(3) D-1部分にモリコートGペースト、D-2部分にグリス（PG-671）を塗布し、取り外し方の逆の手順で取り付けます。

[注意] ① ローラーモードの挿入忘れがないこと。

f. Replacement of gears

f-1 Replacement of the RF gear

(1) Remove M1.2 lock washer④, pull it up from the stud and remove the gear as shown in Figure 8.

(2) Mount it, following the removal steps in the reverse order.

f-1 RFギアの交換方法

(1) ロックワッシャー④（M1.2）を外し、スタットより引き抜きギアを外します。（図8参照）

(2) 取り外し方の逆の手順で取り付けます。

f-2 Replacement of the take-up gear

(1) Remove M1.2 lock washer④, pull it up from the stud and remove the gear as shown in Figure 8.

(2) Mount it, following the removal steps in the reverse order.

NOTES on f-1 and f-2 :

① Do not reuse the used lock washer for remounting.

② Take care to avoid damage by piercing and tearing.

f-2 テイクアップギアの交換方法

(1) 2個のロックワッシャー④（M1.2）を外し、スタットより引き抜きギアを外します。（図8参照）

(2) 取り外し方の逆の手順で取り付けます。

[f1, f2の注意]

① 一度使用したロックワッシャーは組立時には使用しないで下さい。

② ロックワッシャー取り付け時、口開き、めくれのない様に注意すること。

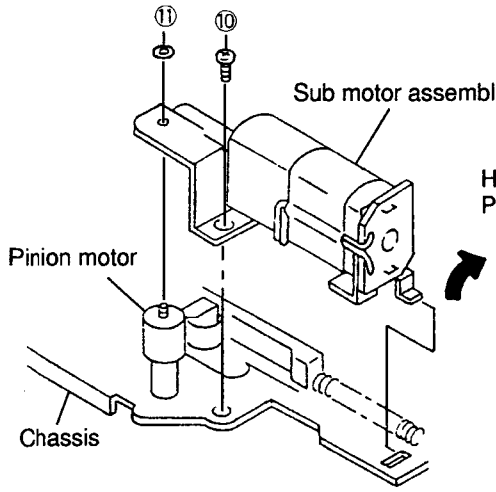


Figure 9

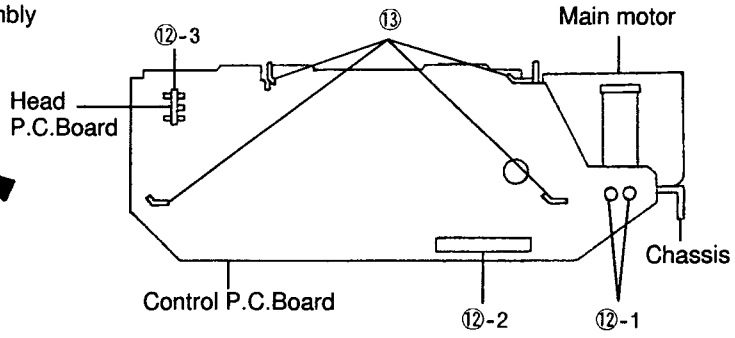


Figure 10

4. Replacement of the parts mounted on the front of the main chassis

4. メインシャーシ表側部品の交換方法

a. Replacement of the control P.C.Board

(1) Remove four solders ⑫ and remove the head P.C.Board and the two wire flat as shown in Figure 10.
(2) Remove four claws ⑬ and remove the P.C.Board as shown in Figure 10.
(3) After replacing the old P.C.Board with a new one, mount it following the removal steps in the reverse order.
NOTE : ① Since the wire flat is very easily damaged, handle it with care.
② When using the soldering iron, set the temperature of the soldering iron to 320° ±30℃ and the soldering time to less than 3 seconds, but solder point ⑫-3 to less than 1 second.
③ Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damage.

a. コントロール基板の交換方法

(1) 4ケ所の半田⑫を外し、ヘッド基板と2本のワイヤーフラット（2P)、(10P) をそれぞれ外します。(図10参照)
(2) 4ケ所のツメ⑬を外し、コントロール基板を外します。(図10参照)
(3) 良品のコントロール基板と交換後、取り外し方の逆の手順で基板を取り付けます。
[注意] ① ワイヤーフラットは損傷し易いので取扱いには十分注意すること。
② 半田ゴテを使用する際、半田ゴテ先温度320° ±30℃、半田付け時間3秒以下とする。
但し、⑫-3は1秒以下とする。
③ ルーズ半田、ショート等のないこと。

b. Replacement of the sub motor assembly

(1) Remove M1.2 lock washer ⑪ and one screw ⑩ as shown in Figure 9.
(2) Remove the sub motor assembly by pulling it up in the direction of the arrow as shown in Figure 9.
(3) Mount it, following the removal steps in the reverse order.
NOTE : ① Do not reuse the used lock washer for remounting.
② Take care to avoid damage by piercing and tearing.
③ Fasten the one screw with a fastening torque of 6kg.cm.

b. サブモーター組立の交換方法

(1) ロックワッシャー⑪（M1.2）と1本のネジ⑩を外します。(図9参照)
(2) 図中の矢印の方向へ持ち上げながらサブモーター組立を外します。
(図9参照)
(3) 取り外し方の逆の手順で取り付けます。
[注意] ① 一度使用したロックワッシャーは組立時には使用しないで下さい。
② ロックワッシャー取り付け時、口開き、めくれのない様に注意すること。
③ ネジは6kgcmのトルクで締め付けること。

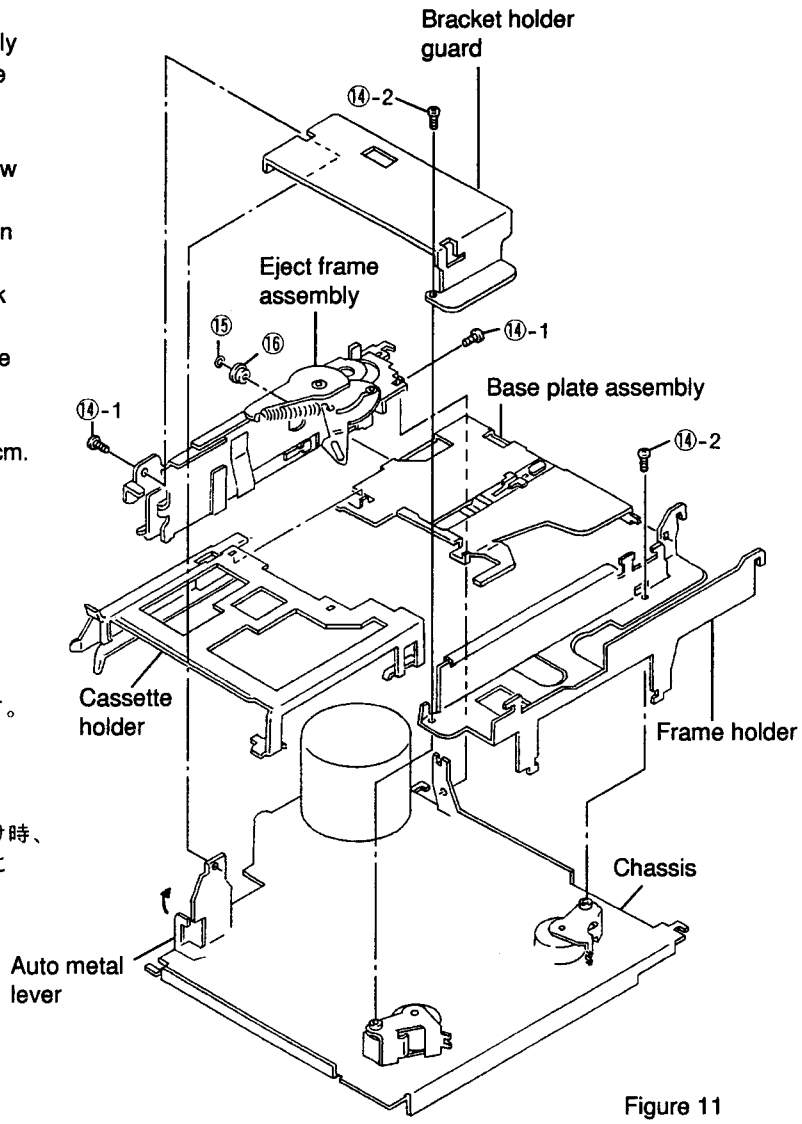


Figure 11

c. Disassembly and assembly of the cassette holder

(1) Remove four screws ⑭ and remove the eject frame assembly and the frame holder as shown in Figure 11.

(2) Remove M1.2 lock washer ⑮ and plate base roller ⑯ and remove the cassette holder and the base plate assembly as shown in Figure 11.

(3) Remount them following the removal steps in the reverse order.

NOTE : ① When mounting the cassette holder and the base plate, insert the slider shaft into the eject arm and fix them turning the slider shaft in the direction indcated by the arrow in the figure . Make sure that the cassette holder and the base plate are in the cassette-in mode during this operation. (Refer to Figure 12)

② When mounting the eject frame assembly, push the auto metal lever in the direction indicated by the arrow in the Figure 11.

③ When mounting the base plate assembly and the eject frame assembly, or when mounting the eject frame assembly to the chassis, do not apply excessive force to avoid deformations of the eject arm and the frame.

④ Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

⑤ Fasten the two screws ⑭-1 with a fastening torque of 6kg.cm. and the two screws ⑭-2 with a fastening torque of 1.5kg.cm.

c. カセットホルダーの分解方法及び組立方法

(1) 4本のネジ⑭を外し、イジェクトフレーム組立及びフレームホルダーを外します。(図11参照)

(2) ロックワッシャー⑮ (M1.2) とプレートベースローラー⑯を外し、カセットホルダーとベースプレート組立を外します。(図11参照)

(3) 分解方法と逆の手順で取り付けます。

[注意] ① カセットホルダーとベースプレート組立を組み立てる際、スライダーのシャフトをイジェクトアームに挿入し、図の様に矢印方向に回しながら取り付けます。この時カセットホルダーとベースプレートはカセットインの状態で行うこと。(図12参照)

② イジェクトフレーム組立をシャーシーに取り付ける際、オートメタルレバーを図の様に矢印方向に押して下さい。(図11参照)

③ ベースプレート組立とイジェクトフレーム組立を取り付ける際、又、シャーシーとイジェクトフレーム組立を取り付ける際は、必要以上の力を加えないで下さい。(イジェクトアーム、フレームの変形防止の為)

④ 一度使用したワッシャーは、使用しないこと。又、口開き、めくれのないこと。

⑤ ネジ⑭-1は6kgcm、⑭-2は1.5kgcmのトルクで締め付けること。

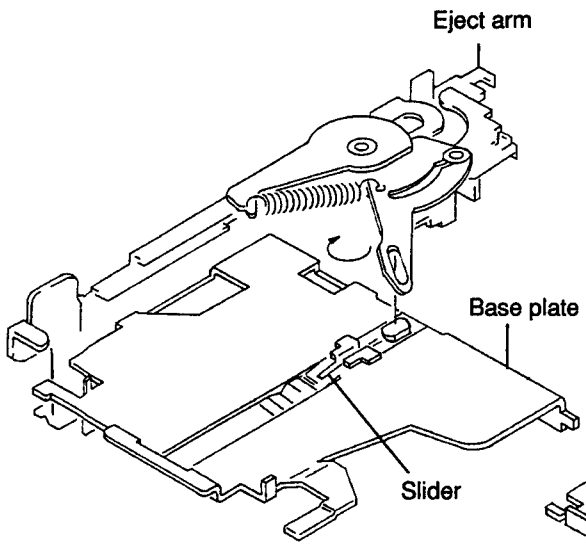


Figure 12

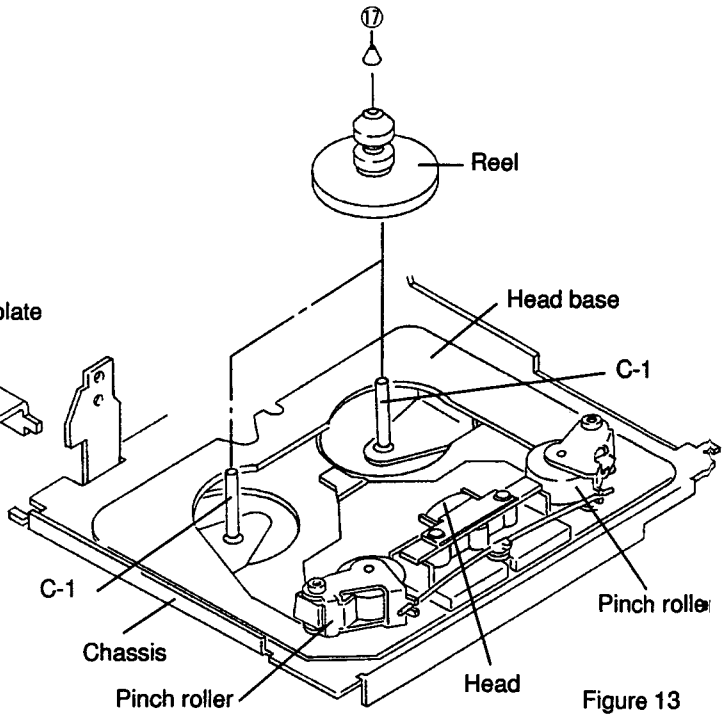


Figure 13

d. Replacement of the reels
(1) Remove two reel cap ⑰ as shown in Figure 13.
(2) After replacement, apply the grease (PG-671) to the section C-1, and mount the new reels following the removal steps in the reverse order.
(3) After mounting, check the tape speed and the wow & flutter with test tape MTT-111N.
NOTE : ① Since the reel is easily loosened if the cap is gripped, always handle it gripping, the gear.

d. リールの交換方法
(1) 2個のリールキャップ⑰をそれぞれ外します。(図13参照)
(2) 良品のリールと交換後C-1部分にグリス (PG-671) を塗布し、取り外し方の逆の手順で取り付けます。
(3) 取り付け後、必ずテストテープ (MTT-111N) でテープスピード・ワウフラッターの確認をすること。
[注意] ① リールの取り外し、取り付けの際、キャップをつかむと外れ易いので必ずギア部をつかんで行って下さい。

e. Replacement of the pinch rollers
(1) Remove pinch roller spring ⑱ as shown in Figure 14.
(2) Remove M3.1 two lock washers ⑲ and remove the pinch roller and guide pack as shown in Figure 14.
(3) Mount the pinch rollers following the removal steps in the reverse order. Apply the molykote G paste to the section C-2 as shown in Figure 14.
NOTE : ① Make sure that the pinch rollers are thoroughly fixed and that they are not deformed.
② Do not reuse the used lock washers for remounting.
③ Take care to avoid damage by piercing and tearing.

e. ピンチローラーの交換方法
(1) ピンチローラースプリング⑱を外します。(図14参照)
(2) 2個のロックワッシャー⑲ (M3.1) をそれぞれ外し、ガイドパックと一緒にピンチローラーを外します。(図14参照)
(3) C-2部分にモリコートGペーストを塗布し、取り外し方の逆の手順で取り付けます。
[注意] ① ピンチローラーの半掛け、変形のないこと。
② 一度使用したロックワッシャーは組立時には使用しないで下さい。
③ ロックワッシャー取り付け時、口開き、めくれのない様に注意すること。

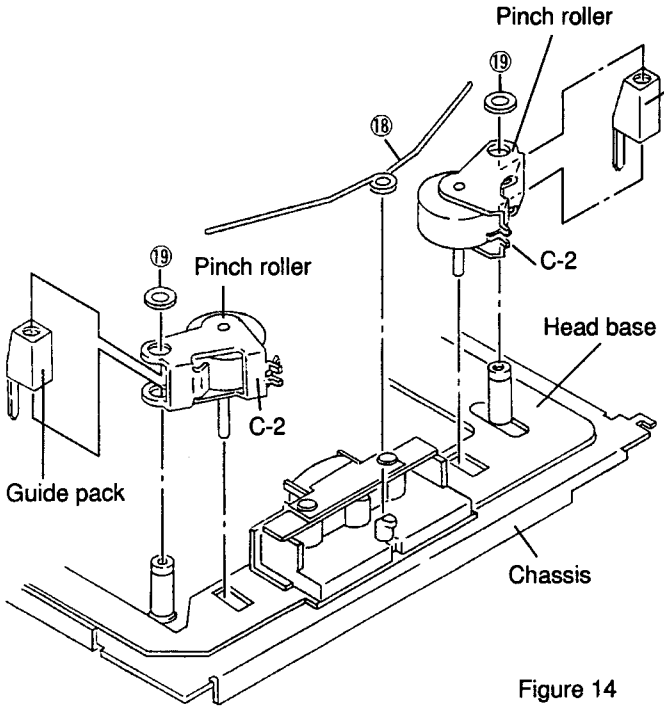


Figure 14

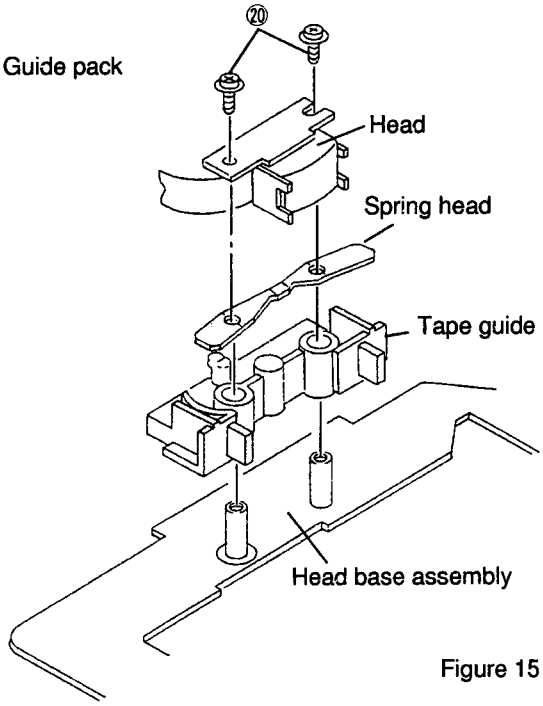


Figure 15

f. Replacement of the head

(1) After removing the pinch roller spring, remove two screws ⑳ as shown in Figure 15.

(2) Remove solder 23 and remove the head from the head P.C.Board as shown in Figure 16.

(3) After replacement, mount the new head following the removal steps in the reverse order.

NOTE : ① When using the soldering iron, set the temperature of the soldering iron to270° ±20℃ and the soldering time to less than 1 second.

② Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damage.

③ Do not bring the soldering iron near the head P.C.Board. Make sure that the head P.C.Board is not lifted.

④ Fasten the two screws with a fastening torque 1kg.cm. Note that the tension of the head spring can be descreased if the screws are fastened too strongly.

(4) Adjust the height of the head as shown in Figure 17, 18 and 19.

(4) -1 Place the height adjustment gauge(AI-500) on the head base, and adjust the height so that the check bar fits in the tape head guide smoothly.

(4) -2 When the check bar touches the top (or bottom) of the tape guide, insert a spacer (t0.1mm or polyslider washer t0.13mm). If necessary, remove the spacer.

NOTE : ① If you do not have a height gauge like described in (4)-1, run the tape at normal speed and adjust the height of the head and the tape head guide so that the tape does not curl.

(5) After having assembled the complete mechanism, adjust the angle of the head with test tape MTT-114NB. (Refer to chapter "Adjustment of the head angle".) After the adjustment, apply the screw lock and fix the screws.

f. ヘッドの交換方法

(1) ピンチローラースプリングを外した後、2本のネジ⑳を外します。(図15参照)

(2) 半田23を外し、ヘッド基板からヘッドを取り外します。(図16参照)

(3) 良品のヘッドと交換後、取り外し方の逆の手順で取り付けます。

[注意] ① 半田ゴテを使用する際、半田ゴテ先温度270° ±20℃、半田付け時間1秒以下とする。

② ルーズ半田、ショート等のないこと。

③ ヘッド基板には、コテ先を当てないこと。又、ヘッド基板に浮きがない様注意すること。

④ 2本のネジは1kgcmのトルクで締め付けること。但し、ネジを締め過ぎるとヘッドバネがヘタり、バネ性がなくなるので注意すること。

(4) ヘッド高さ調整を行います。(図17、18、19参照)

(4) -1 高さゲージ (AI-500) をヘッドベースにのせ、チェック・バーがテープヘッドガイドにスムーズに入る高さに合わせます。

(4) -2 テープガイドの上 (又は下) にチェック・バーが当たる時は、スペーサー (t0.1mm又はポリスライダーワッシャーt0.13mm) を一枚入れます。又は、スペーサーを外すことによって当りをなくす様にします。

[注意] ① (4) -1の様に高さゲージがない場合は、テープを通常走行させ、テープカーリングが生じなくなる様に高さ (ヘッド及びテープヘッドガイド) を調整します。

(5) 最終的な1台のメカと言う状態に組み上げた後、テストテープ (MTT-114NB) でヘッドの角度を調整します。(ヘッド角度調整方法の項目を参照して下さい。) 調整後、ネジロックを塗布し、ネジを固定します。

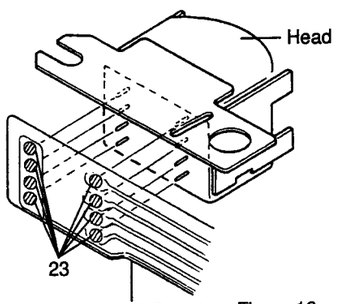


Figure 16

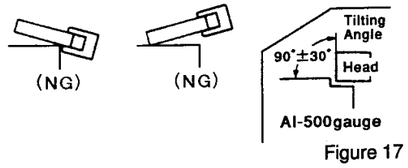


Figure 17

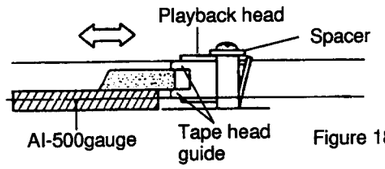


Figure 18

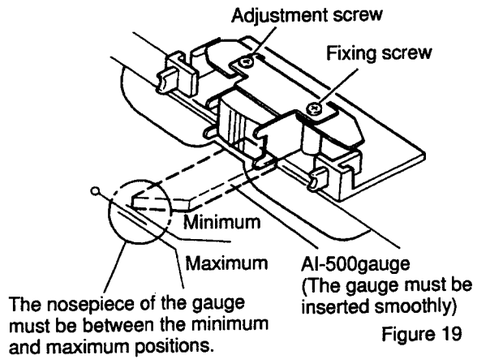


Figure 19

MEMO

Exploded View (Cassette Deck Mechanism)

Cassette Deck Mechanism Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol No.		Index	Part No.	Description
	2		04B41345P32	Washer, Lock (M3.1)
	3		03S43997P63	Screw, Pan (M1.7 ×4)
	4	3-D	01A71716W01	Assy., Riv. Select Swing
	5	2-F	01A71714W01	Assy., Riv. RF Lever A
	6	2-E	01A71715W01	Assy., Riv. RF Lever B
	7	2-F	41A71781W01	Spring, RF
	9	3-D	03C42723U12	Screw, Cup (M2 ×2.5)
	11		03A80452W01	Screw, F Locks (M2 ×10.7)
	13	2-B	41A31756W01	Spring, Head
○	14	2-B	84T45462W01	Head P.C.Board
●	14	2-B	84T25151W01	Head P.C.Board
	16	2-G	44A71747W01	Gear, Sun
	17		44A71748W01	Gear, Planet
	18	3-F	44A71749W01	Gear, Inner
	19	2-F	44A71751W01	Pinion, Eject Base
	20	2-F	44A71752W01	Pinion, Eject
	21		04B41345P11	Washer, Lock (M1.2)
	22	2-G	43A41656W01	Spacer, UHMW-PE
	24	3-G	30T65174W07	Wire, Flat 10P
	26	5-B	07B71778W01	Holder, Cassette
	27	3-C	45A71736W01	Lever, Pack In Switch
	28	5-C	43A71775W01	Roller, Plate Base
	29		04B41345P01	Washer, Lock (M1.2)
	30	4-B	04B41345P15	Washer, Lock (M1.2)
	32	5-C	44A71753W01	Rack, GR-S
	33	5-C	41A80634W01	Spring, Rack
	34	4-C	01A71720W01	Assy., Riv. Eject Arm A
	35	4-C	41B63283F11	Spring
	36	4-A	01A71712W01	Assy., Riv. Plate Base
	37	3-B	45B71750W01	Slider
	38		01A71783W01	Flywheel
	39		01A71784W01	Reel
	40	3-B	01B81372W01	Assy., Pinch Roller
	41	3-B	01B81372W02	Assy., Pinch Roller
	42	3-F	44B71726W01	Rack, Mode
	45	2-C	45B71729W01	Lever, Select
	46	3-E	45A71737W01	Lever, Mode Switch
	47	3-E	45A71733W01	Lever, Lock
	48	2-E	44A71741W01	Gear, Take Up
	49	2-F	44A71742W01	Gear, RF
	50		43A71743W01	Guide, Pack
	51	2-E	49A71744W01	Pulley, Idler
	52	3-D	44A71746W01	Pinion, Motor
	53		49A71003W01	Reel, Cap
	54	2-F	42A71780W01	Belt
	55	2-B	41A10387W01	Spring, Pinch Roller
	56		43A71774W01	Roller, Mode
	57		03S44205G30	Screw, Pan (M2.6 ×4)
	58	4-D	03A80629W01	Screw, Special (M2.6 ×6)
	59	3-D	04B41345P02	Washer, Lock (M1.7)
	60	2-F	04S40075G05	Washer, Polyslider (M2.1)
●	or	2-F	04T55449W01	Washer, Teflon
	61	3-F	04B41345P13	Washer, Lock (M1.7)

Miscellaneous

	501	2-A	88T75612W01	Head
○	502	2-C	01V74500W16	Assy., Main Motor (13.2V-55mA)
●	502	2-C	01V84200W63	Assy., Main Motor (6V-90mA)
	503	3-D	01V74500W23	Assy., Sub Motor (7V-370mA)
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2
	506	2-D	40T15222W01	Switch, Detector (PACK IN)
	507	4-F	40T15382W02	Switch, Detector (PAUSE)
	508	4-F	40T15382W02	Switch, Detector (MODE)
	509	4-F	40T15382W02	Switch, Detector (METAL)

NOTE : ○: For GR75S120 Model Only, ●: For GR75S130 Model Only, Others : Common.

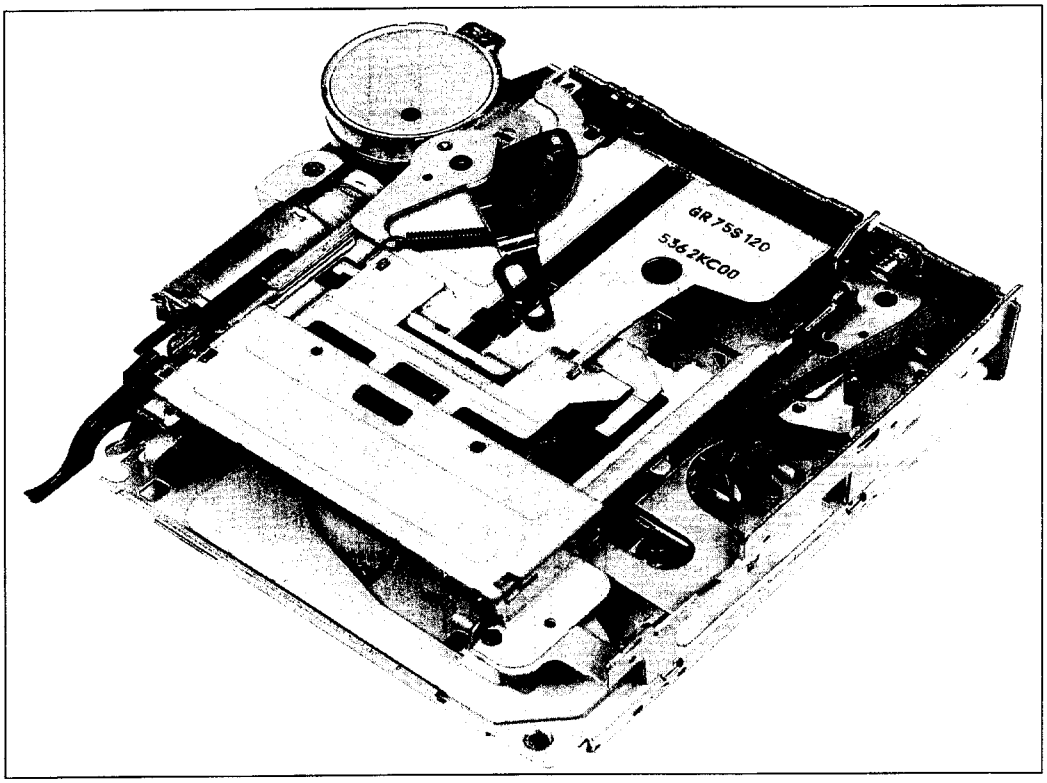
ALPINE®

SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED

- This manual is described on GR75S310 only. The GR75S310 is developed from GR-S SERIES. For information that is not mentioned in this service manual, refer to the Service Manual • GR-S SERIES (68E23241S01).
- 当マニュアルはGR75S310についてのみ記載しております。又、GR-S SERIESがベースモデルとなっておりますので、相違部分のみ記載しております。詳細についてはGR-S SERIES (68E23241S01) を参照願います。



GR-S SERIES

Contents

Cassette Deck Mechanism Assembly Parts List (Only Difference) 2
Exploded View (Cassette Deck Mechanism) ..... 3 to 4

Basic Operation of GR-S Mechanism
Disassembly, Assembly and Replacement of Function Parts
] Refer to the Service Manual · GR-S SERIES (Part No. 68E23241S01).

NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

Cassette Deck Mechanism Assembly Parts List

NOTE: The parts is not mentioned, refer to the Service Manual · DR-S SERIES (Part No.68E23241S01).

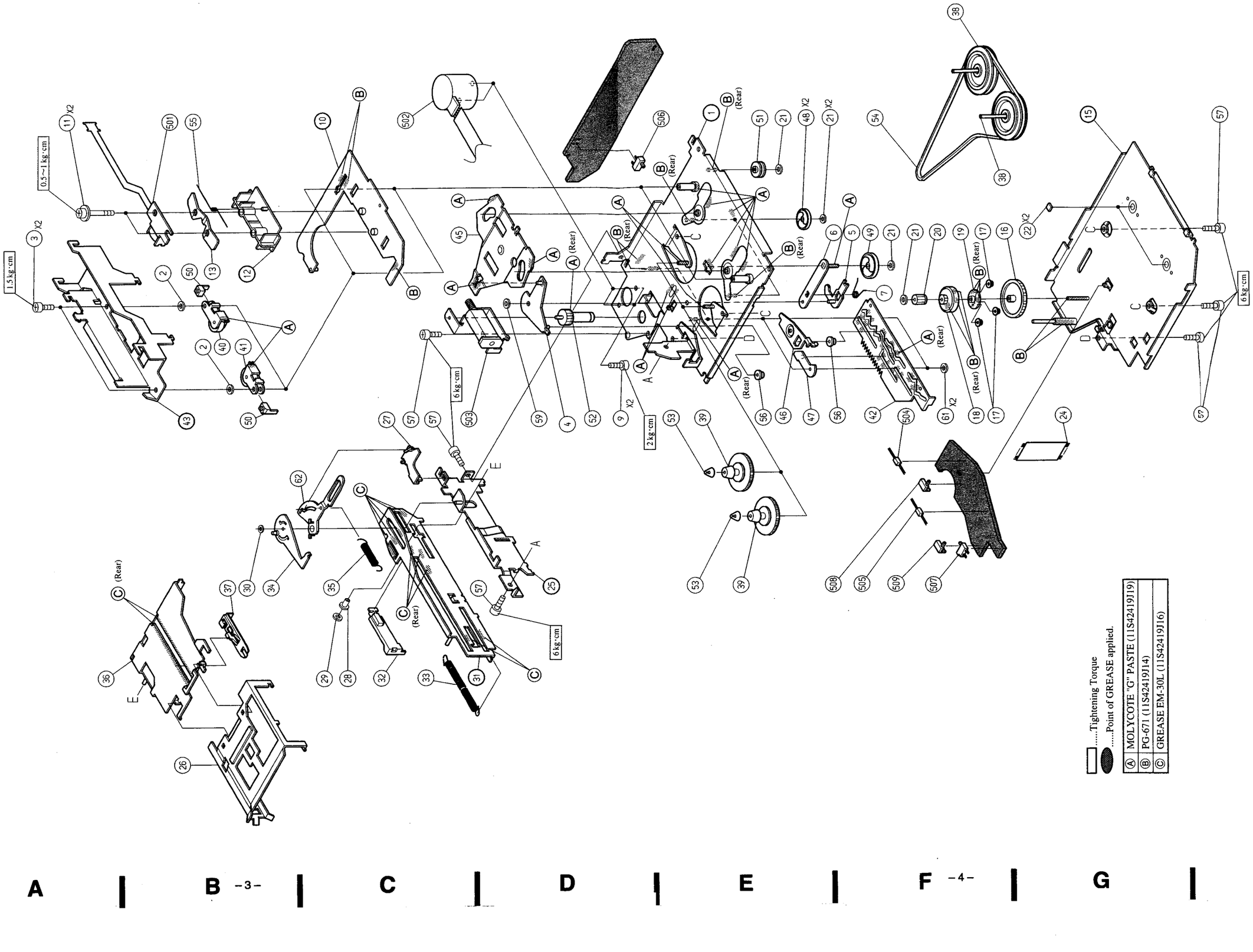
Symbol No.	Index	Part No.	Description
4	3-D	01A90342W01	Assy., Riv. Select Swing
5	2-F	01A90340W01	Assy., Riv. RF Lever A
6	2-F	01A90341W01	Assy., Riv. RF Lever B
11	2-A	03A80452W02	Screw, F Locks (M2X10.7)
13	2-B	41A31756W02	Spring, Head
26	5-B	07B40012W02	Holder, Cassette
27	3-C	45A71736W02	Lever, Pack In Switch
34	4-B	01A90346W01	Assy., Riv. Eject Arm (B)
36	4-A	01A90338W01	Assy., Riv. Plate Base
38		01A90350W01	Assy., Flywheel
40	3-B	01B30863W01	Assy., Pinch Roller
41	3-B	01B30863W02	Assy., Pinch Roller
42	3-F	44B90318W01	Rack, Mode
45	2-C	45B90320W01	Lever, Select
46	3-E	45A71737W02	Lever, Mode Switch
47	3-E	45A71733W02	Lever, Lock
53		49A81855W01	Reel, Cap
54	2-F	42A71780W02	Belt
55	2-B	41A10387W02	Spring, Pinch Roller
62	3-B	45A90322W01	Lever, Eject Arm A
Miscellaneous			
501	2-B	88T95215W02	Head
503	3-C	01V91700W81	Assy., Sub Motor (7V-370mA)

カセットデッキメカニズム関係部品表

※ 記載されていない部品については、サービスマニュアル・GR-S SERIES (68E23241S01) を参照願います。

記号	索引	部品番号	部品名	標準卸価格
4	3-D	01A90342W01	Assy., Riv. Select Swing	—
5	2-F	01A90340W01	Assy., Riv. RF Lever A	—
6	2-F	01A90341W01	Assy., Riv. RF Lever B	—
11	2-A	03A80452W02	Screw, F Locks (M2X10.7)	45
13	2-B	41A31756W02	Spring, Head	60
26	5-B	07B40012W02	Holder, Cassette	260
27	3-C	45A71736W02	Lever, Pack In Switch	—
34	4-B	01A90346W01	Assy., Riv. Eject Arm (B)	—
36	4-A	01A90338W01	Assy., Riv. Plate Base	—
38		01A90350W01	Assy., Flywheel	—
40	3-B	01B30863W01	Assy., Pinch Roller	240
41	3-B	01B30863W02	Assy., Pinch Roller	240
42	3-F	44B90318W01	Rack, Mode	—
45	2-C	45B90320W01	Lever, Select	—
46	3-E	45A71737W02	Lever, Mode Switch	—
47	3-E	45A71733W02	Lever, Lock	—
53		49A81855W01	Reel, Cap	45
54	2-F	42A71780W02	Belt	—
55	2-B	41A10387W02	Spring, Pinch Roller	—
62	3-B	45A90322W01	Lever, Eject Arm A	—
その他の電気部品				
501	2-B	88T95215W02	Head	1,210
503	3-C	01V91700W81	Assy., Sub Motor (7V-370mA)	1,440

Exploded View (Cassette Deck Mechanism)



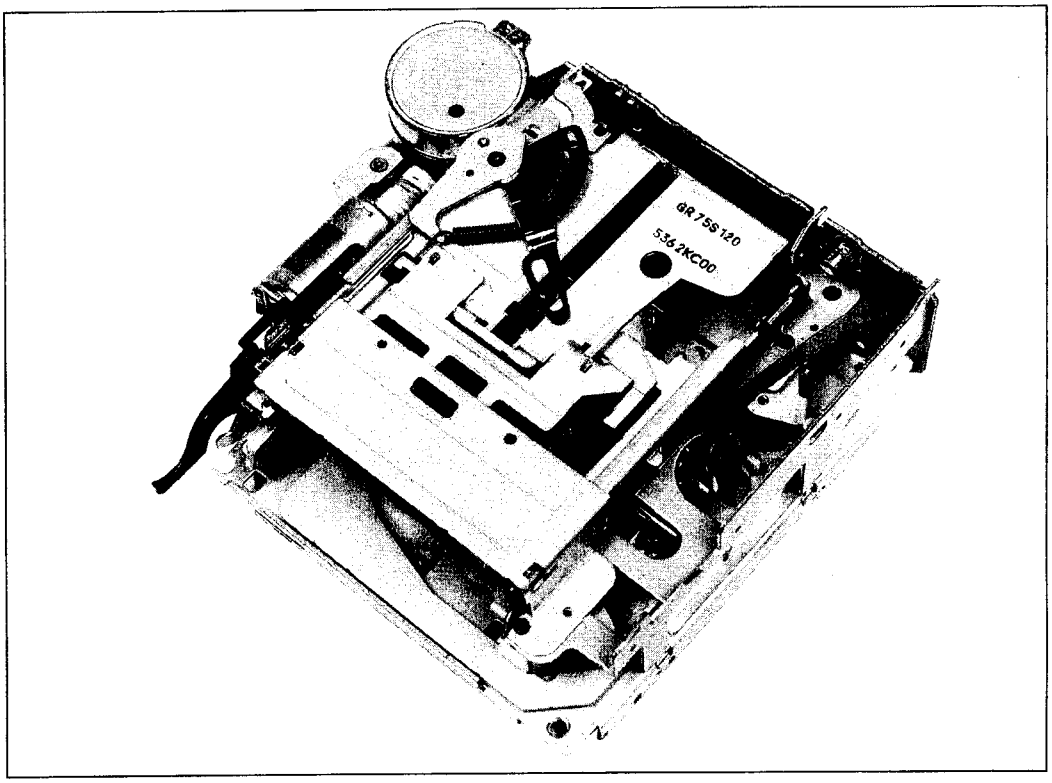
ALPINE®

SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED (II)

- This manual is described on GR75S410/42Y only. The GR75S410/42Y is developed from GR-S SERIES. For information that is not mentioned in this service manual, refer to the Service Manual • GR-S SERIES (68E23241S01).
- 当マニュアルはGR75S410/42Yについてのみ記載しております。又、GR-S SERIESがベースモデルとなっておりますので、相違部分のみ記載しております。詳細についてはGR-S SERIES (68E23241S01) を参照願います。



GR-S SERIES

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Exploded View (Cassette Deck Mechanism) ..... 5 to 6

Basic Operation of GR-S Mechanism
Disassembly, Assembly and Replacement of Function Parts

Refer to the Service Manual · GR-S SERIES (Part No. 68E23241S01).

NOTE: Due to continuing product improvement, specifications and designs are subject to change without notice.

Cassette Deck Mechanism Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol No.	Index	Part No.	Description
	2	04B41345P32	Washer, Lock (M3.1)
	3	03S43997P63	Screw, Pan (M1.7X4)
	4 3-D	01A90342W02	Assy., Riv. Select Swing
	5 2-F	01A71714W01	Assy., Riv. RF Lever A
	6 2-E	01A90341W02	Assy., Riv. RF Lever B
	7 2-F	41A71781W01	Spring, RF
	9 3-D	03C42723U12	Screw, Cup (M2X2.5)
	11 2-A	03A80452W02	Screw, F Locks (M2X10.7)
	13 2-B	41A31756W01	Spring, Head
	16 2-F	44A71747W01	Gear, Sun
	17	44A71748W01	Gear, Planet
	18 3-F	44A71749W01	Gear, Inner
	19 2-F	44A71751W01	Pinion, Eject Base
	20 2-F	44A71752W01	Pinion, Eject
	21	04B41345P11	Washer, Lock (M1.2)
	22 2-G	43A41656W01	Spacer, UHMW-PE
	24 3-G	30T65174W07	Wire, Flat 10P
	26 5-B	07B71778W01	Holder, Cassette
	27 3-C	45A71736W03	Lever, Pack In Switch
	28 4-C	43A71775W01	Roller, Plate Base
	29 4-C	04B41345P01	Washer, Lock (M1.2)
	30 4-B	04B41345P15	Washer, Lock (M1.2)
	32 4-C	44A71753W01	Rack, GR-S
	33 4-C	41A80634W01	Spring, Rack
	34 4-B	01A90346W02	Assy., Riv. Eject Arm (B)
	35 4-C	41B63283F11	Spring
	36 4-A	01A71712W01	Assy., Riv. Plate Base
	37 4-B	45B71750W01	Slider
○	38	01A90350W01	Assy., Flywheel
●	38	01A71783W10	Assy., Flywheel
	39	01A71784W01	Reel
	40 3-B	01B30863W01	Assy., Pinch Roller
	41 3-B	01B30863W02	Assy., Pinch Roller
	42 3-F	44B71726W01	Rack, Mode
	45 2-C	45B90320W02	Lever, Select
	46 3-E	45A71737W03	Lever, Mode Switch
	47 3-E	45A71733W03	Lever, Lock
	48 2-E	44A71741W01	Gear, Take Up
	49 2-F	44A71742W01	Gear, RF
	50	43A71743W01	Guide, Pack
	51 2-E	49A71744W01	Pulley, Idler
	52 3-D	44A71746W01	Pinion, Motor
	53	49A81855W01	Reel, Cap
	54 2-F	42A71780W02	Belt
	55 2-B	41A10387W02	Spring, Pinch Roller
	56 3-E	43A71774W01	Roller, Mode
	57	03S44205G30	Screw, Pan (M2.6X4)
●	58 4-D	03A80629W01	Screw, Special (M2.6X6)
	59 3-D	04B41345P02	Washer, Lock (M1.7)
●	60 2-F	04S40075G05	Washer, Polyslider (M2.1)
●	or 2-F	04T55449W01	Washer, Polyslider (M2.1)
	61 3-F	04B41345P23	Washer, Lock (M1.7)
	62 3-B	45A90322W02	Lever, Eject Arm A

Miscellaneous

○	501	2-B	88T95215W02	Head
●	501	2-B	88T75612W03	Head
○	502	2-C	01V94900W74	Assy., Main Motor (13.2V-95mA)
●	502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)
	503	3-C	01V74500W23	Assy., Sub Motor (7V-370mA)
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2
	506	2-D	40T15222W01	Switch, Detector (PACK IN)
	507	4-F	40T15382W02	Switch, Detector (PAUSE)
	508	4-E	40T15382W02	Switch, Detector (MODE)
	509	4-F	40T15382W02	Switch, Detector (METAL)

NOTE : ○: For GR75S410 Model Only, ●: For GR75S42Y Model Only, Others : Common.

カセットデッキメカニズム関係部品表

※ 部品表に記入されていない部品は供給されません。

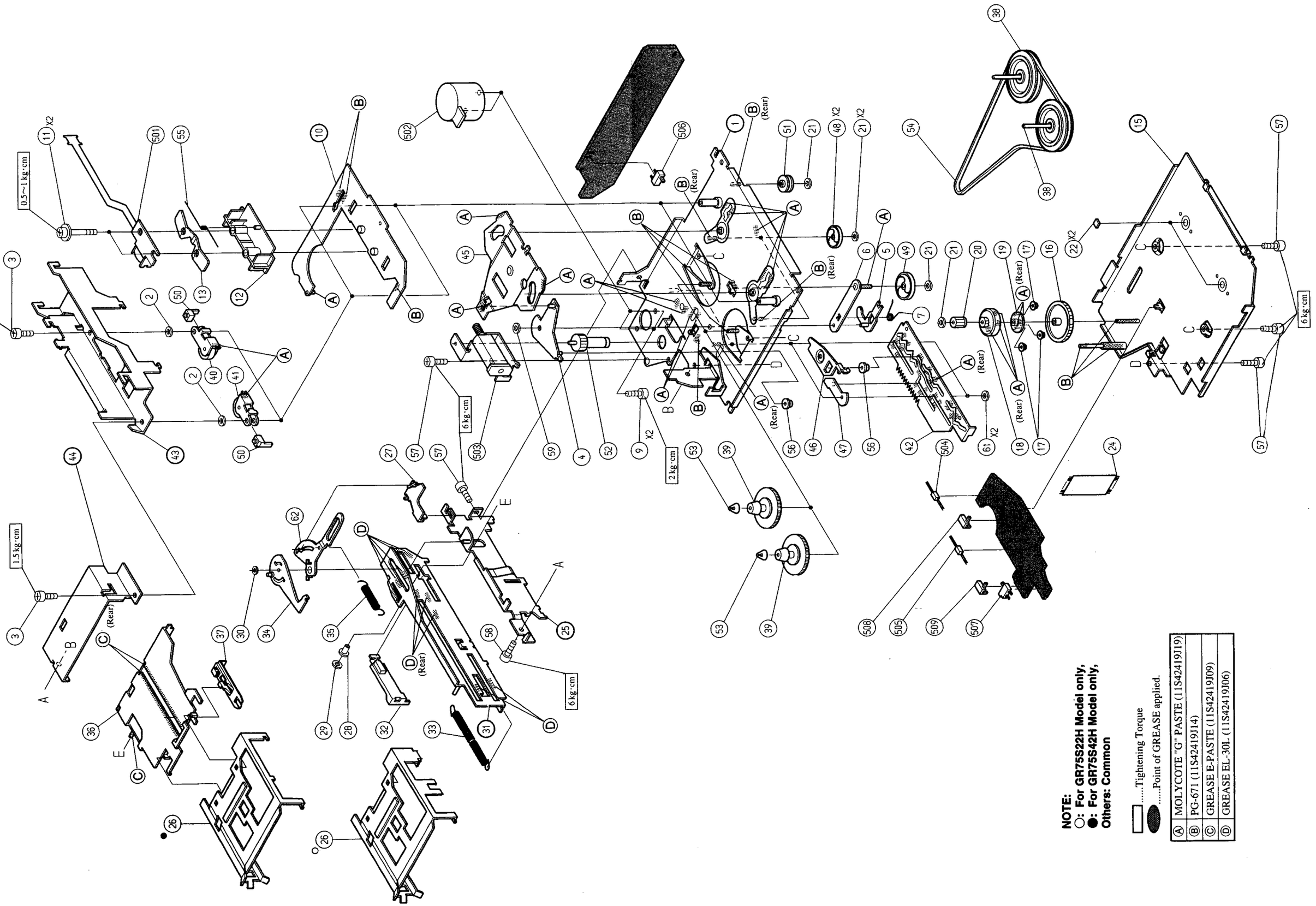
	記号	索引	部品番号	部品名	標準卸価格
	2		04B41345P32	Washer, Lock (M3.1)	45
	3		03S43997P63	Screw, Pan (M1.7X4)	45
	4	3-D	01A90342W02	Assy., Riv. Select Swing	—
	5	2-F	01A71714W01	Assy., Riv. RF Lever A	120
	6	2-E	01A90341W02	Assy., Riv. RF Lever B	—
	7	2-F	41A71781W01	Spring, RF	45
	9	3-D	03C42723U12	Screw, Cup (M2X2.5)	45
	11	2-A	03A80452W02	Screw, F Locks (M2X10.7)	45
	13	2-B	41A31756W01	Spring, Head	60
	16	2-F	44A71747W01	Gear, Sun	50
	17		44A71748W01	Gear, Planet	45
	18	3-F	44A71749W01	Gear, Inner	—
	19	2-F	44A71751W01	Pinion, Eject Base	100
	20	2-F	44A71752W01	Pinion, Eject	90
	21		04B41345P11	Washer, Lock (M1.2)	45
	22	2-G	43A41656W01	Spacer, UHMW-PE	45
	24	3-G	30T65174W07	Wire, Flat 10P	160
	26	5-B	07B71778W01	Holder, Cassette	240
	27	3-C	45A71736W03	Lever, Pack In Switch	—
	28	4-C	43A71775W01	Roller, Plate Base	50
	29	4-C	04B41345P01	Washer, Lock (M1.2)	45
	30	4-B	04B41345P15	Washer, Lock (M1.2)	45
	32	4-C	44A71753W01	Rack, GR-S	130
	33	4-C	41A80634W01	Spring, Rack	80
	34	4-B	01A90346W02	Assy., Riv. Eject Arm (B)	—
	35	4-C	41B63283F11	Spring	45
	36	4-A	01A71712W01	Assy., Riv. Plate Base	260
	37	4-B	45B71750W01	Slider	45
○	38		01A90350W01	Assy., Flywheel	380
●	38		01A71783W10	Assy., Flywheel	450
	39		01A71784W01	Reel	370
	40	3-B	01B30863W01	Assy., Pinch Roller	240
	41	3-B	01B30863W02	Assy., Pinch Roller	240
	42	3-F	44B71726W01	Rack, Mode	120
	45	2-C	45B90320W02	Lever, Select	—
	46	3-E	45A71737W03	Lever, Mode Switch	—
	47	3-E	45A71733W03	Lever, Lock	—
	48	2-E	44A71741W01	Gear, Take Up	45
	49	2-F	44A71742W01	Gear, RF	45
	50		43A71743W01	Guide, Pack	45
	51	2-E	49A71744W01	Pulley, Idler	45
	52	3-D	44A71746W01	Pinion, Motor	60
	53		49A81855W01	Reel, Cap	45
	54	2-F	42A71780W02	Belt	140
	55	2-B	41A10387W02	Spring, Pinch Roller	45
	56	3-E	43A71774W01	Roller, Mode	50
	57		03S44205G30	Screw, Pan (M2.6X4)	45
●	58	4-D	03A80629W01	Screw, Special (M2.6X6)	50
	59	3-D	04B41345P02	Washer, Lock (M1.7)	45
●	60	2-F	04S40075G05	Washer, Polyslider (M2.1)	45
●	or	2-F	04T55449W01	Washer, Polyslider (M2.1)	45
	61	3-F	04B41345P23	Washer, Lock (M1.7)	45
	62	3-B	45A90322W02	Lever, Eject Arm A	—

その他の電気部品

	記号	索引	部品番号	部品名	標準卸価格
○	501	2-B	88T95215W02	Head	1,210
●	501	2-B	88T75612W03	Head	1,240
○	502	2-C	01V94900W74	Assy., Main Motor (13.2V-95mA)	1,460
●	502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)	1,480
	503	3-C	01V74500W23	Assy., Sub Motor (7V-370mA)	1,500
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2	310
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2	310
	506	2-D	40T15222W01	Switch, Detector (PACK IN)	130
	507	4-F	40T15382W02	Switch, Detector (PAUSE)	130
	508	4-E	40T15382W02	Switch, Detector (MODE)	130
	509	4-F	40T15382W02	Switch, Detector (METAL)	130

注記 ：○：GR75S410 モデル専用, ●：GR75S42Y モデル専用, その他：共通

Exploded View (Cassette Deck Mechanism)



ALPINE®

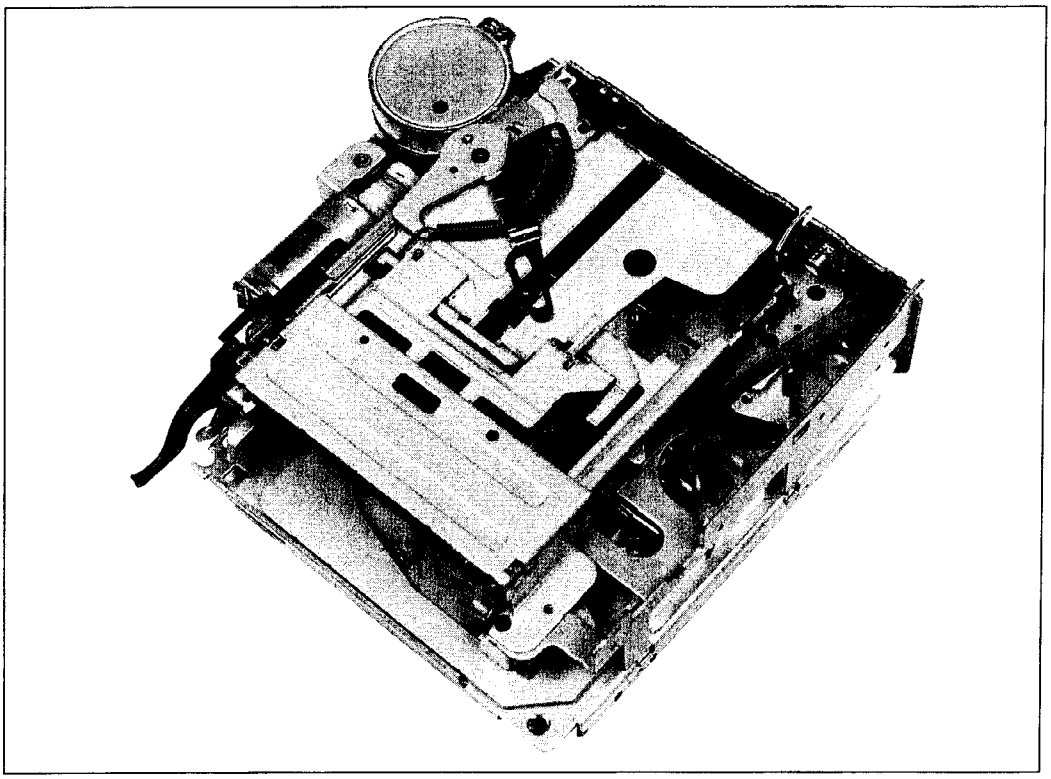
SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED (III)

● This manual is described on GR75S22H/42H only. The GR75S22H/42H is developed from GR-S SERIES. For information that is not mentioned in this service manual, refer to the Service Manual • GR-S SERIES (68E26177S01).

● 当マニュアルはGR75S22H/42Hについてのみ記載しております。又、GR-S SERIESがベースモデルとなっておりますので、相違部分のみ記載しております。詳細についてはGR-S SERIES (68E26177S01) を参照願います。



GR-S SERIES

Contents

Cassette Deck Mechanism Assembly Parts List ..... 3 to 4
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Basic Operation of GR-S Mechanism
Disassembly, Assembly and Replacement of Function Parts

Refer to the Service Manual · GR-S SERIES (Part No. 68E23241S01).

NOTE: Due to continuing product improvement, specifications and designs are subject to change without notice.

Cassette Deck Mechanism Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol No.		Index	Part No.	Description
	2		04B41345P32	Washer, Lock (M3.1)
	3		03S43997P63	Screw, Pan (M1.7X4)
○	4	3-D	01A90342W01	Assy., Riv. Select Swing
●	4	3-D	01A90342W02	Assy., Riv. Select Swing
○	5	2-F	01A90340W01	Assy., Riv. RF Lever A
●	5	2-F	01A71714W01	Assy., Riv. RF Lever A
○	6	2-E	01A90341W01	Assy., Riv. RF Lever B
●	6	2-E	01A90341W02	Assy., Riv. RF Lever B
	7	2-F	41A71781W01	Spring, RF
	9	3-D	03C42723U12	Screw, Cup (M2X2.5)
	11	2-A	03A80452W02	Screw, F Locks (M2X10.7)
	13	2-B	41A31756W01	Spring, Head
	16	2-F	44A71747W01	Gear, Sun
	17		44A71748W01	Gear, Planet
	18	3-F	44A71749W01	Gear, Inner
	19	2-F	44A71751W01	Pinion, Eject Base
	20	2-F	44A71752W01	Pinion, Eject
	21		04B41345P11	Washer, Lock (M1.2)
	22	2-G	43A41656W01	Spacer, UHMW-PE
	24	3-G	30T65174W07	Wire, Flat 10P
○	26	5-C	07B40012W01	Holder, Cassette
●	26	5-B	07B71778W01	Holder, Cassette
○	27	3-C	45A71736W02	Lever, Pack In Switch
●	27	3-C	45A71736W03	Lever, Pack In Switch
	28	4-C	43A71775W01	Roller, Plate Base
	29	4-C	04B41345P01	Washer, Lock (M1.2)
	30	4-B	04B41345P15	Washer, Lock (M1.2)
	32	4-C	44A71753W01	Rack, GR-S
	33	4-C	41A80634W01	Spring, Rack
○	34	4-B	01A90346W01	Assy., Riv. Eject Arm (B)
●	34	4-B	01A90346W02	Assy., Riv. Eject Arm (B)
	35	4-C	41B63283F11	Spring
○	36	4-A	01A40024W03	Assy., Riv. Plate Base
●	36	4-A	01A71712W01	Assy., Riv. Plate Base
	37	4-B	45B71750W01	Slider
	38		01A90350W01	Assy., Flywheel
	39		01A71784W01	Reel
	40	3-B	01B30863W01	Assy., Pinch Roller
	41	3-B	01B30863W02	Assy., Pinch Roller
○	42	3-F	44B90318W01	Rack, Mode B
●	42	3-F	44B71726W01	Rack, Mode
○	45	2-C	45B90320W01	Lever, Select
●	45	2-C	45B90320W02	Lever, Select
○	46	3-E	45A71737W02	Lever, Mode Switch
●	46	3-E	45A71737W03	Lever, Mode Switch
○	47	3-E	45A71733W02	Lever, Lock
●	47	3-E	45A71733W03	Lever, Lock
	48	2-E	44A71741W01	Gear, Take Up
	49	2-F	44A71742W01	Gear, RF
	50		43A71743W01	Guide, Pack
	51	2-E	49A71744W01	Pulley, Idler
	52	3-D	44A71746W01	Pinion, Motor
	53		49A81855W01	Reel, Cap
	54	2-F	42A71780W02	Belt
	55	2-B	41A10387W02	Spring, Pinch Roller
	56		43A71774W01	Roller, Mode
	57		03S44205G30	Screw, Pan (M2.6X4)
	58	4-D	03A80629W01	Screw, Special (M2.6X6)
	59	3-D	04B41345P02	Washer, Lock (M1.7)
	61	3-F	04B41345P23	Washer, Lock (M1.7)
○	62	3-B	45A90322W01	Lever, Eject Arm A
●	62	3-B	45A90322W02	Lever, Eject Arm A

Miscellaneous

	501	2-B	88T75612W03	Head
○	502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)
●	502	2-C	01V94900W74	Assy., Main Motor (13.2V-95mA)
○	503	3-C	01V91700W81	Assy., Sub Motor (7V-370mA)
●	503	3-C	01V11700Y92	Assy., Sub Motor (7V-370mA)
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2
	506	2-D	40T15222W01	Switch, Detector (PACK IN)
	507	4-F	40T15382W02	Switch, Detector (PAUSE)
	508	4-E	40T15382W02	Switch, Detector (MODE)
	509	4-F	40T15382W02	Switch, Detector (METAL)

NOTE : ○: For GR75S22H Model Only, ●: For GR75S42H Model Only, Others : Common.

カセット・デッキ・メカニズム関係部品表

※ 部品表に記入されていない部品は供給されません。

記号	索引	部品番号	部品名	標準卸価格
2		04B41345P32	Washer, Lock (M3.1)	45
3		03S43997P63	Screw, Pan (M1.7X4)	45
○ 4	3-D	01A90342W01	Assy., Riv. Select Swing	—
● 4	3-D	01A90342W02	Assy., Riv. Select Swing	—
○ 5	2-F	01A90340W01	Assy., Riv. RF Lever A	160
● 5	2-F	01A71714W01	Assy., Riv. RF Lever A	120
○ 6	2-E	01A90341W01	Assy., Riv. RF Lever B	—
● 6	2-E	01A90341W02	Assy., Riv. RF Lever B	—
7	2-F	41A71781W01	Spring, RF	45
9	3-D	03C42723U12	Screw, Cup (M2X2.5)	45
11	2-A	03A80452W02	Screw, F Locks (M2X10.7)	45
13	2-B	41A31756W01	Spring, Head	60
16	2-F	44A71747W01	Gear, Sun	50
17		44A71748W01	Gear, Planet	45
18	3-F	44A71749W01	Gear, Inner	—
19	2-F	44A71751W01	Pinion, Eject Base	100
20	2-F	44A71752W01	Pinion, Eject	90
21		04B41345P11	Washer, Lock (M1.2)	45
22	2-G	43A41656W01	Spacer, UHMW-PE	45
24	3-G	30T65174W07	Wire, Flat 10P	160
○ 26	5-C	07B40012W01	Holder, Cassette	280
● 26	5-B	07B71778W01	Holder, Cassette	240
○ 27	3-C	45A71736W02	Lever, Pack In Switch	—
● 27	3-C	45A71736W03	Lever, Pack In Switch	—
28	4-C	43A71775W01	Roller, Plate Base	50
29	4-C	04B41345P01	Washer, Lock (M1.2)	45
30	4-B	04B41345P15	Washer, Lock (M1.2)	45
32	4-C	44A71753W01	Rack, GR-S	130
33	4-C	41A80634W01	Spring, Rack	80
○ 34	4-B	01A90346W01	Assy., Riv. Eject Arm (B)	—
● 34	4-B	01A90346W02	Assy., Riv. Eject Arm (B)	—
35	4-C	41B63283F11	Spring	45
○ 36	4-A	01A40024W03	Assy., Riv. Plate Base	240
● 36	4-A	01A71712W01	Assy., Riv. Plate Base	260
37	4-B	45B71750W01	Slider	45
38		01A90350W01	Assy., Flywheel	380
39		01A71784W01	Reel	370
40	3-B	01B30863W01	Assy., Pinch Roller	240
41	3-B	01B30863W02	Assy., Pinch Roller	240
○ 42	3-F	44B90318W01	Rack, Mode B	160
● 42	3-F	44B71726W01	Rack, Mode	120
○ 45	2-C	45B90320W01	Lever, Select	—
● 45	2-C	45B90320W02	Lever, Select	—
○ 46	3-E	45A71737W02	Lever, Mode Switch	—
● 46	3-E	45A71737W03	Lever, Mode Switch	—
○ 47	3-E	45A71733W02	Lever, Lock	—
● 47	3-E	45A71733W03	Lever, Lock	—
48	2-E	44A71741W01	Gear, Take Up	45
49	2-F	44A71742W01	Gear, RF	45
50		43A71743W01	Guide, Pack	45
51	2-E	49A71744W01	Pulley, Idler	45
52	3-D	44A71746W01	Pinion, Motor	60
53		49A81855W01	Reel, Cap	45
54	2-F	42A71780W02	Belt	140
55	2-B	41A10387W02	Spring, Pinch Roller	45
56		43A71774W01	Roller, Mode	50
57		03S44205G30	Screw, Pan (M2.6X4)	45
58	4-D	03A80629W01	Screw, Special (M2.6X6)	50
59	3-D	04B41345P02	Washer, Lock (M1.7)	45
61	3-F	04B41345P23	Washer, Lock (M1.7)	45
○ 62	3-B	45A90322W01	Lever, Eject Arm A	—
● 62	3-B	45A90322W02	Lever, Eject Arm A	—

その他の電気部品

記号	索引	部品番号	部品名	標準卸価格
501	2-B	88T75612W03	Head	1,240
○ 502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)	1,460
● 502	2-C	01V94900W74	Assy., Main Motor (13.2V-95mA)	1,480
○ 503	3-C	01V91700W81	Assy., Sub Motor (7V-370mA)	1,440
● 503	3-C	01V11700Y92	Assy., Sub Motor (7V-370mA)	1,460
504	3-F	51T63433F03	Sensor, Photo ON2170-R2	310
505	4-F	51T63433F03	Sensor, Photo ON2170-R2	310
506	2-D	40T15222W01	Switch, Detector (PACK IN)	130
507	4-F	40T15382W02	Switch, Detector (PAUSE)	130
508	4-E	40T15382W02	Switch, Detector (MODE)	130
509	4-F	40T15382W02	Switch, Detector (METAL)	130

注記：○：GR75S22Hモデル専用，　●：GR75S42Hモデル専用，　その他：共通

Exploded View (Cassette Deck Mechanism)